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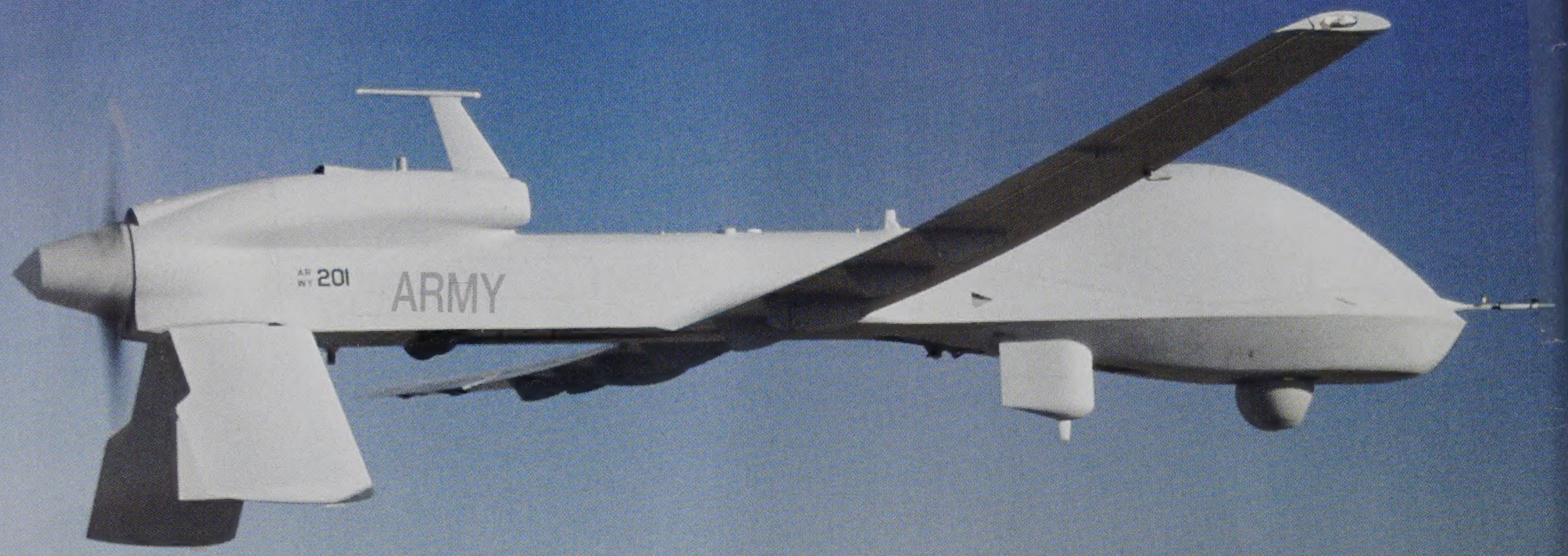


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ARMY MAGAZINE

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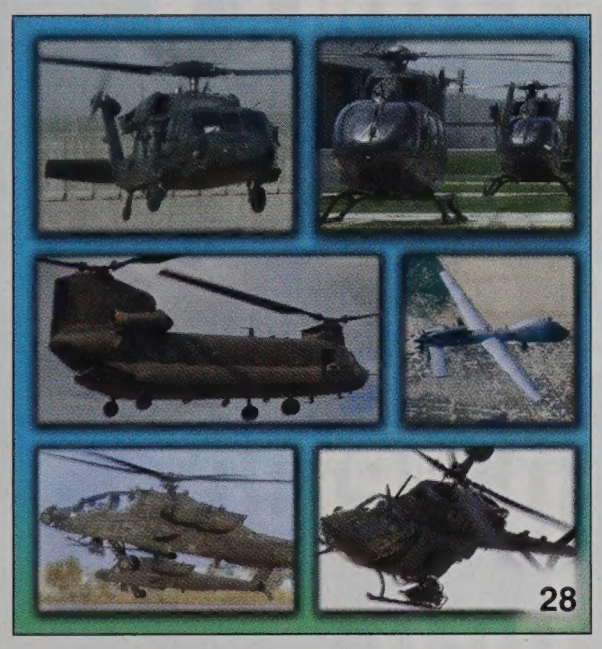
VOL. 59, NO. 1 | January 2009

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FRONT & CENTER

Welcoming the Overdue Resurrection of Deterrence *By Richard Hart Sinnreich* ***Page 17***
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Military Power: The Logic for Keeping and Using Arms *By Brig. Gen. Huba Wass de Czege, USA Ret.* ***Page 20***
What Goes on in Theater Stays in Theater? *By Lt. Col. Joseph Doty and Maj. Shawn Tenace* ***Page 25***

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Aviation Update: Army Aviation at a Glance *By Maj. Gen. James O. Barclay III*
The Army Aviation Center of Excellence, in supporting the Army force generation effort and shaping and positioning the Aviation branch for the future, is currently reviewing every aspect of Army Aviation. ***Page 28***

Balancing the Equipment Challenges to Support Warfighters Today and Tomorrow *By Scott R. Gourley*
A representative sampling of activities illustrates how the Army Aviation branch is balancing equipment to meet immediate, near- and far-term warfighting requirements. ***Page 34***

Joint Unmanned Aircraft Systems Center of Excellence: Saving More Lives *By Scott R. Gourley*
The Joint Unmanned Aircraft Systems of Excellence, based at Creech Air Force Base, Nev., works to safely accommodate a growing number of unmanned aircraft systems (UAS) flying in the same airspace, to identify core skills UAS operators should have and to standardize UAS identifiers among the services. ***Page 43***

West Point Launches Oral History Center *By Dennis Steele*
The West Point Center for Oral History, which is developing an online resource that will document military history from a soldier's viewpoint, will be a learning tool for students, a research center for scholars and a central source for understanding the calling of the U.S. soldier. ***Page 46***

Army Poised For EW Resurgence *By Scott R. Gourley*
The release of a new electronic warfare (EW) field manual, the formal establishment of a new EW functional area and assignments of personnel to that area indicate a resurgence of the Army's EW organizations and capabilities in recent years. ***Page 47***

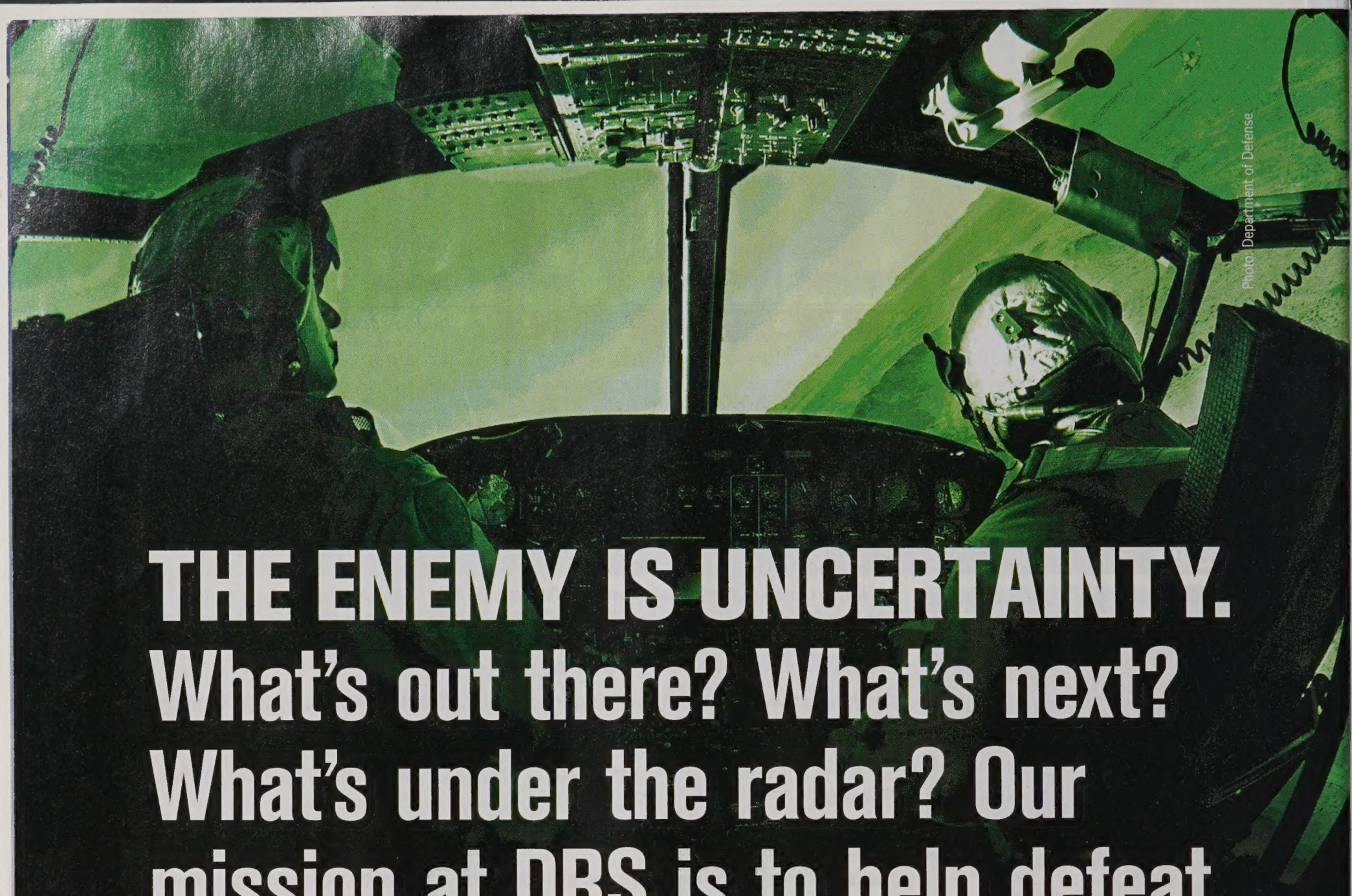
The West Point Museum *Photographs by Dennis Steele*
Photographs of exhibits at the West Point Museum offer a sampling of a large and diverse collection that documents the changes in warfare and represents every American conflict since the British defeat at the Battle of Saratoga in 1777. ***Page 50***

Hail to the Chief: The U.S. Army and the Inaugural Parade *By Toni Eugene*
The Army, a major participant in inaugural celebrations since George Washington's inauguration in 1789, features the U.S. Army Field Band, the Old Guard Fife and Drum Corps, and the U.S. Army Band (Pershing's Own) in the traditional parade from the Capitol to the White House. ***Page 52***

Company Command—Building Combat-Ready Teams: CSI: Baghdad?
Company commanders, aware that each mission becomes an opportunity to gather information, discuss the distinction between tactical site exploitation and sensitive site exploitation. ***Page 53***

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DRS TECHNOLOGIES

Transition and Transformation in 2009

By AUSA President Gen. Gordon R. Sullivan, USA Ret.

As we approach the transition and promises of transformation with a new President, number 44, and a new Congress, the 111th, the needs of the Army have not changed. In fact, the pending transition/transformation may even require greater allocation of national resources.

AUSA will maintain its position on increased end strength, increased share of the base DoD budget and the need for preservation of those policies and resource levels to maintain our terrific all-volunteer force. Our 2009 resolutions reflect our focus on those issues.

Our new national leadership in the White House and Congress must recognize that there has been a paradigm shift regarding forces of a strategic nature. As a nation, we must have a defense establishment that is trained and ready to execute successful missions across the entire spectrum of expected engagements, from homeland security to large-scale conflict. The list of elements across this spectrum grows almost daily: cyber-terrorism, weapons of mass destruction, sleeper cells, existing nuclear club members, conventional forces and so on. Our new leaders must focus on two challenges: the economy and the existing threats to our nation. This includes our two theater wars, Iraq and Afghanistan.

The paradigm shift I mention is the existence of a new strategic triad to meet current wars and future threats. This new strategic paradigm is landpower: Army soldiers, marines and special operations forces. Recognition of such does not diminish the need to maintain the world's best Navy and Air Force. Today the fight—or prevention of the fight—is more of a joint effort than ever.

Today we have an Army of more than one million, including active, Guard and Reserve. We have more than 130,000 troops deployed in Iraq and Afghanistan—active, Guard and Reserve. The mix of the three components in combat is significant, as the role of the citizen-soldier has gone from strategic reserve to operational reserve. Today, that operational reserve is committed. In theater, airmen and sailors supplement the ground forces. That alone speaks to the need for a larger landpower force—soldiers and marines. I worry, however, that because of campaign rhetoric and the state of the economy, we might face a reduction in strength and budget.

A fall 2008 *Wall Street Journal* article—"Boots on the Ground or Weapons in the Sky?"—cited the dilemma the new administration will face regarding national defense policies and funding as "This-War-itis" versus "Next-War-itis." There is ongoing internal debate over what kind of wars we should prepare to fight.

One faction favors buying state-of-the-art weapons systems that would be useful in traditional conflict with a nation like Russia or China. They argue that it is far too soon to conclude that U.S. forces will never fight a conventional war again. They note that China has been dramatically expanding its military. They also note that Russia's recent invasion of Georgia showed that the United States might one day have to fight Moscow on behalf of American allies like Poland and Ukraine.

The other side believes the military should prepare for grinding insurgencies that closely resemble the conflicts in Iraq and Afghanistan. They argue that the enthusiasm for advanced weapons systems is misplaced, contending that a battery of expensive weapons are useless in counterinsurgency conflicts like Iraq.

For the most part, soaring defense budgets since 9/11 have long kept Pentagon officials from having to settle the debate, providing plenty of money for each side's priorities. For 2009, the Pentagon's base budget is $512 billion, which is up approximately 7 percent from 2008 and at a historic level. The Army's share is $140 billion for its base budget. Last year, supplemental spending for the wars in Iraq and Afghanistan added more than $100 billion to the Pentagon's coffers for that budget year.

This is beginning to change, however, a casualty of the widening global financial crisis. With the economy slowing and the tab for the government's bailout of the private sector spiraling higher, the two competing schools of thought each warn that making the wrong decisions now could imperil U.S. national security down the road. The final decision will ultimately fall to the new administration, which will have to decide how to divvy up what may be a significantly smaller defense budget.

The defense of our nation is a responsibility shared by the new administration, Congress and the citizenry. It is important that citizens stay informed and engaged. We must never lose sight of that—the factions, movements and nations that we fight today will eagerly exploit any weakness shown.

When they conducted a joint press conference at the AUSA Annual Meeting in October, Army Chief of Staff Gen. George W. Casey Jr. and Secretary of the Army Pete Geren raised some basic questions that need to be answered: What does our nation want the Army to do? What is the proper role of the Guard and Reserve? What will be our access to the Guard and Reserve? What's the role of contractors? What are we willing to pay for this Army?

Today we need an Army of 700,000 for our active forces, a share of the DoD budget of at least 28 percent (vice the traditional 24 percent), and a defense budget equal to 4 percent of our gross domestic product. This is not extravagant—it is a necessity if we are to continue to remain strong to fight and win our nation's wars, today and tomorrow. ★

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Letters



This Month's Cover

Army Aviation is highlighted in this issue in connection with AUSA's symposium (January 7–9, Arlington, Va.) on the subject. Clockwise from top: Kiowa, UH-72A Lakotas, AH-64D Apache Longbow, CH-47 Chinook, Sky Warrior UAV, UH-60 Black Hawk. The articles begin on page 28. *(For photograph credits, see pages 28–29.)*

Native Speakers

■ The December 2008 "News Call" item about the 51st Translator Interpreter Company and the new military occupational specialty designation for native or "heritage" speakers who've been speaking a foreign language at home struck a familiar note. During World War II, some 6,000 Japanese-American soldiers received advanced training in a Military Intelligence Service language program preparatory to overseas duty. By the end of the war, about 2,000 or more had served in the Pacific or Southeast Asia. They interrogated enemy prisoners, translated captured documents, listened to Japanese radio communications, prepared propaganda and undertook dangerous missions to eavesdrop on enemy positions or convince Japanese soldiers to surrender. Their efforts saved countless American lives and greatly facilitated the ultimate American victory. In postwar Japan, they performed valuable services to ensure the success of the American occupation. Their accomplishments clearly proved the military value of native and heritage speakers.

An official history of these accomplishments was recently published by the U.S. Army Center of Military History (CMH Pub 70-99-1). Authored by James C. McNaughton, it is titled *Nisei Linguists: Japanese Americans in the Military Intelligence Service during World War II* and is available from the Government Printing Office.

COL. STANLEY L. FALK, AUS RET.
Alexandria, Va.

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited for reasons of style, accuracy or space limitations. Letters should be typewritten and double-spaced. All letters must include the writer's full name, address and home telephone number. The volume of letters we receive makes individual acknowledgment impossible. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via e-mail to armymag@ausa.org.

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Washington Report

Gen. Eric Shinseki to Lead Veterans Affairs

President-elect Barack Obama has selected Gen. Eric K. Shinseki, U.S. Army retired, to lead the Department of Veterans Affairs (VA). Gen. Shinseki served as Chief of Staff of the Army from 1999 to 2003 and Army Vice Chief of Staff from 1998-99. A 38-year Army veteran, he is noted for his vision of a network-centric Army and his plan to make the Army more strategically deployable.

Testifying before the Senate Armed Services Committee in February 2003, Gen. Shinseki publicly questioned the Bush administration's strategy of invading Iraq with a relatively small force and said several hundred thousand U.S. troops might be necessary to maintain peace following the invasion.

He retired from the service in June 2003. In November 2006, then-commanding general of U.S. Central Command Gen. John P. Abizaid testified before the Armed Services committee that "Gen. Shinseki was right."



DoD/Helene C. Stikkel

Former Army Chief of Staff Gen. Eric K. Shinseki, U.S. Army Retired

Veterans and military leaders cheered the selection of Gen. Shinseki, who would replace Army Lt. Gen. (Dr.) James B. Peake as secretary of the VA, a cabinet-level appointment that must be approved by Congress. At the news conference announcing his nomination for the post, Gen. Shinseki said: "A word to my fellow veterans: If confirmed, I will work each and every day to ensure that we are serving you as well as you have served us."

Gen. Shinseki, 66, is the first four-star general of Asian-American ancestry in U.S. history and the first to lead a U.S. military service. A 1965 graduate of the U.S. Military Academy at West Point, he held a variety of command and staff positions in the United States and abroad. Serving twice in Vietnam, he was awarded three Bronze Stars and two Purple Hearts. Gen. Shinseki holds a master's degree in English literature from Duke University, Durham, N.C. He graduated from the Armor Officer advanced course and attended the Command and General Staff College at Fort Leavenworth, Kan., and the National War College in Washington, D.C.

Before he became Vice Chief of Staff in 1998, Gen. Shinseki was commanding general, U.S. Army Europe and Seventh Army/commander, Allied Land Forces Central Europe, Germany, with additional duty as commander, NATO Stabilization Force, Bosnia-Herzegovinia.

Gen. Shinseki would take over the VA at a particularly challenging time. One of the largest agencies in the federal government, the VA employs some 240,000 people and last year had a budget of $93.4 billion, but processes claims so slowly that many veterans currently wait six months for disability benefits. The department is also scrambling to upgrade technology before August, when legislation providing new GI benefits takes effect.

DoD Addresses Importance of IW. The Pentagon recently approved a policy directive—Number 3000.07—that elevates irregular warfare (IW) to equal status with traditional warfare. IW encompasses counterterrorism and counterinsurgency operations, guerrilla warfare, foreign internal defense and stability operations, and it can include a variety of steady-state and surge activities and operations.

The document defines irregular warfare as: "A violent struggle among state and nonstate actors for legitimacy and influence over the relevant population(s). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary's power, influence, and will."

The 12-page directive, signed by Deputy Secretary of Defense Gordon England, spells out the duties and responsibilities of defense personnel, from undersecretaries to combatant commanders. It represents formal acceptance, after more than a year of debate, of the changing role of the military in a world where large-scale warfare poses a diminishing threat while dangers from nonstate entities, such as terrorists, grow. Secretary of Defense Robert M. Gates has long lobbied for such recognition, and the document codifies lessons the U.S. military has been implementing for years.

The directive charges DoD to step up its capabilities to fight unconventionally so that it is as effective in IW as it is in traditional combat. To help achieve that goal, DoD must extend U.S. reach by operating with and through indigenous foreign forces. U.S. forces must build the capabilities of foreign militaries and security forces and do less of the fighting themselves.

DoD envisions that the main method of carrying out future IW operations will be through a global network composed of U.S. and foreign militaries and other government personnel in numerous nations with which the United States is not at war. The network—already under way—is designed to wage steady-state counterterrorism campaigns.

The Pentagon must also develop capabilities to conduct large-scale irregular operations like those in Afghanistan and Iraq.

Because IW is manpower intensive, the new policy will likely shift more resources toward training in such skills as learning a second language or advising foreign militaries. The directive supports the continued growth of special operations forces and directs U.S. Special Operations Command to extend "U.S. reach into denied areas and uncertain environments." The commander of U.S. Joint Forces Command is tasked with leading the collaborative development of Joint IW-relevant doctrine.

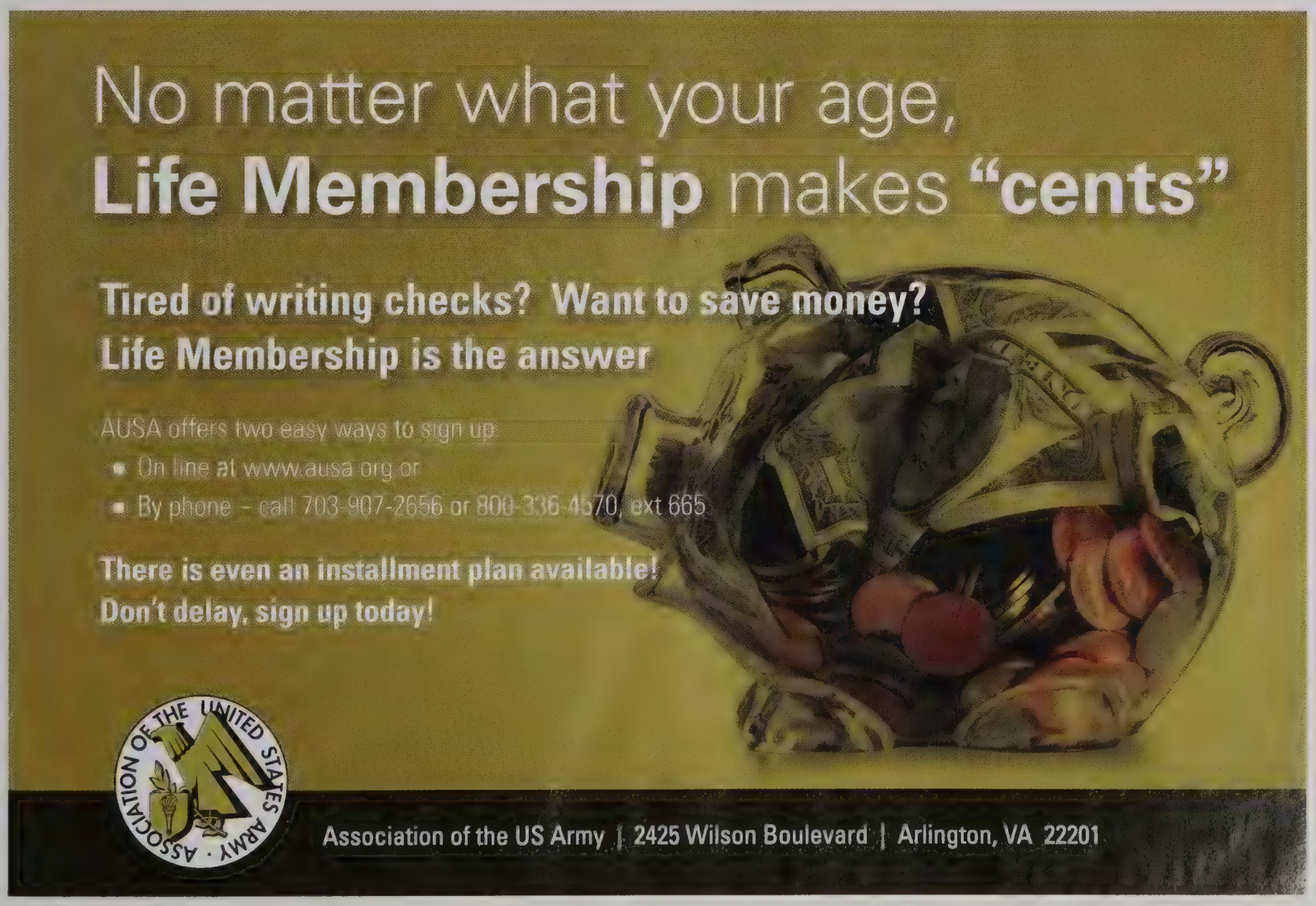
To obtain a copy of the directive, visit the DoD issuances web site at http://www.dtic.mil/whs/directives and click on "What's New."

Gates Remains Defense Secretary. President-elect Obama has asked Secretary of Defense Robert M. Gates to continue in his position as the new administration takes office. In accepting the position, Secretary Gates said: "Mindful that we are engaged in two wars and face other serious challenges at home and around the world, and with a profound sense of personal responsibility to and for our men and women in uniform and their families, I must do my duty as they do theirs … the opportunity to lead our brave and dedicated soldiers, sailors, airmen, marines and defense civilians has been the most gratifying experience of my life."

In a media roundtable at the Pentagon following his appointment, Secretary Gates told reporters that the duration of his stay in the job is "open-ended." He also said that the process of increasing dwell time will be gradual and that it could begin as early as this spring. Although he repeated his dislike for stop-loss, Secretary Gates said he saw no end to the policy in 2009.

Commemorative Coins Approved. The 110th Congress, in one of its final actions, passed the United States Army Commemorative Coin Act in November, which authorizes the U.S. Treasury to mint coins "in recognition and celebration of the establishment of the U.S. Army in 1775, to honor the American soldier of both today and yesterday, in wartime and in peace, and to commemorate the traditions, history and heritage of the U.S. Army and its role in American society from the colonial period to today." President Bush signed the bill into law in December. The coins—a five-dollar gold piece, a silver dollar and a copper-clad half-dollar—will be the first U.S. coins since 1775 issued to celebrate and honor the U.S. Army and its heritage.

The coins will be minted and sold during 2011. An estimated $10 to $12 million of the U.S. Mint's sales revenue from the commemorative coins will be applied to the campaign to build the National Museum of the United States Army at Fort Belvoir, Va. The Army Historical Foundation, designated as the Army's primary partner in building the museum, led the drive to establish the Army commemorative coins.



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News Call

New Year Brings New Restrictions on Combat Ops in Iraq

The Iraqi parliament recently ratified a U.S.-Iraq status-of-forces agreement (SOFA) that authorizes U.S. military presence in Iraq. The security pact, which went into effect on January 1, replaces the U.N. mandate under which multinational forces had previously operated in Iraq. SOFA, which reiterates that the U.S. troop presence is temporary and at the request of the sovereign government of Iraq, gives the Iraqi government greater authority over U.S. troop operations and sets a timetable for withdrawal of American forces.

The agreement sharply reduces U.S. military power, mandating that all military operations carried out "shall be conducted with the agreement of the Government of Iraq. Such operations shall be fully coordinated with Iraqi authorities." U.S. forces may not search homes or other properties without Iraqi search warrants except in the case of actual combat operations. U.S. forces must obtain court orders before detaining or arresting suspects and must turn them over to Iraqi authorities within 24 hours. Iraq cannot be used as a launching pad or transit point for attacks against other countries. In addition, the Iraqi government may prosecute American troops for serious crimes they commit when off duty and off their bases. However, the United States retains the power to determine if a soldier was off duty.

U.S. combat forces must withdraw from Iraqi cities, villages and localities no later than June 30, 2009, to be stationed in facilities agreed upon by both governments. All U.S. forces must withdraw from Iraqi territory no later than December 31, 2011, unless both countries negotiate a separate pact to extend U.S. presence if conditions on the ground are not stable. Each country has the right to cancel the agreement with one year's notice.

Although the Iraqi parliament voted to hold a national referendum on SOFA in July, it may not occur; many mandated referendums in Iraq have been deferred beyond legal deadlines. If the referendum is held and voters reject the pact, the government must notify U.S. troops to withdraw in July 2010, 18 months before the pact's deadline.

Some Iraqis have seen the United States as an occupier with sweeping powers; the bilateral SOFA establishes that the two nations are "sovereign, independent, and coequal countries."

Winter Offensive in Afghanistan. In Afghanistan, winter has been a time when the enemy regroups, plans the next year's campaign and restocks equipment. Maj. Gen. Jeffrey J. Schloesser, commander of Combined Joint Task Force-101 and 101st Airborne Division (Air Assault), has planned a cold-weather campaign that will attack insurgent support areas and safe havens to stymie enemy reorganizing efforts.

In an interview with the *Washington Post*, Gen. Schloesser announced that a portion of the estimated 3,500 troops expected to arrive in Afghanistan in January will be deployed to Logar and Wardak Provinces. Directly south of Kabul, both provinces have lacked a significant Western troop presence and experienced a rash of attacks in 2008. Gen. Schloesser told the *Post* he "would expect from this winter on an increase in violence south of Kabul … caused by us and the Afghans working together."

U.S. commanders are preparing for a winter campaign along the Pakistani border as well. They have pushed out supplies to forward operating bases,



U.S. Army/SSgt. Brandon Aird

Distinguished Service Cross. *Gen. Carter F. Ham, commander of U.S. Army Europe, awards SSgt. Erich R. Phillips, 2nd Battalion, 503rd Infantry Regiment (Airborne), the Distinguished Service Cross (DSC) in Vicenza, Italy, for actions performed in Nuristan Province, Afghanistan, in 2007. SSgt. Phillips is the fifth servicemember to be awarded the DSC for actions during Operation Enduring Freedom.*

combat outposts and observation posts and have insulated buildings, serviced old heaters and installed new ones. Col. John Spiszer, commander of 3rd Brigade Combat Team (BCT), 1st Infantry Division, is responsible for security and stability operations in four northeastern provinces along the Pakistan border. Speaking via teleconference to reporters at the Pentagon, Col. Spiszer said that virtually all of his territory—Nangarhar, Nuristan, Konar and Laghman Provinces—is above 5,000 feet. "Everything else seems to pale beside [that] terrain," he said. Along the border and in the Hindu Kush mountains, it "offers protection for the enemy and a challenge for us to move in, due to lack of roads and helicopter landing zones."

Col. Pete Johnson, who commands the 4th BCT, 101st Airborne Division (Air Assault), told reporters at the Pentagon via teleconference that his operational area—which includes the provinces of Paktika, Paktia, Khost, Logar and Wardak, three of which border Pakistan—has an average elevation at around 6,000 to 7,000 feet, with mountains at 10,000 and 11,000 feet. He said that increased cooperation with the Pakistani military has reduced the enemy's ability to use the area as a transit zone.

Col. Spiszer agreed that the border has become less porous and credited cooperation and coordination that is developing between the Pakistani military and U.S. troops. "We may see some increased violence trends over the winter. … If that is the case, it will be because the Pakistani military is taking away [the enemy's] safe havens in Pakistan," he said.

Army Casualties in Iraq

The following U.S. Army personnel were reported killed in Operation Iraqi Freedom from November 1 to November 30, 2008. All names have been released through the Department of Defense; families have been notified.

Pvt. Charles Yi Barnett, 19
CWO Donald V. Clark, 37
Spc. James M. Clay, 25
PFC Bradley S. Coleman, 24
MSgt. Anthony Davis, 43
Spc. Armando A. De La Paz, 21
PFC Theron V. Hobbs, 22
CWO Christian P. Humphreys, 28
1st Lt. William K. Jernigan, 35
Sgt. Jose Regalado, 23
Spc. Corey M. Shea, 21
SSgt. Timothy H. Walker, 38
Spc. Adam M. Wenger, 27
SFC Miguel A. Wilson, 36

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from November 1 to November 30, 2008. All names have been released through the Department of Defense; families have been notified.

Spc. Jonnie L. Stiles, 38
Sgt. Daniel W. Wallace, 27



NASA

Ready for Takeoff. *Army Lt. Col. Shane Kimbrough prepares for takeoff before heading to Launch Pad 39A at NASA's Kennedy Space Center in Florida in November.*

NCOES Transformation. The Army has undertaken a top-to-bottom transformation of the noncommissioned officer education system (NCOES) to leverage the capabilities of a well-educated and battle-tested NCO corps, focusing more on skills formerly reserved for commissioned officer-level instruction. Changes will include increased emphasis on developing critical thinking and problem-solving skills to prepare flexible and adaptive NCOs to meet the challenges of the full spectrum fight.

The Sergeants Major Academy commandant and staff are leading the Army's NCOES transformation process and implementing changes. Course changes will be made at the Army's 30 NCO academies worldwide by September, following completion of curriculum tests currently under way at Fort Knox, Ky., and Fort Benning, Ga.

As part of the transformation, the



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Picatinny Public Affairs/Audra Calloway

The Right to Salute. *A year after it authorized servicemembers in civilian clothing and veterans to render a military-style salute when the American flag passed and was raised and lowered, Congress has extended that privilege to include salutes during the playing of the national anthem.*

basic noncommissioned officer course will be renamed the advanced leader course, and the advanced noncommissioned officer course will be renamed the senior leader course.

The Sergeants Major Academy curriculum is being modified to follow adaptations of the Command and General Staff College curriculum, which will provide a common frame of reference for the Army's top NCOs and field-grade officers. The changes also will increase the number of college credits given for attending the academy.

NCOs Can Serve Longer. A recent Army decision will allow experienced noncommissioned officers to stay in the Army longer. A November All Army Activities message (267/2008) announced an extension in retention control points (RCP) and age requirements for the rank of staff sergeant and above. The RCP defines the maximum amount of time a soldier may stay in the Army without receiving a promotion. For example, the RCP for a promotable staff sergeant was changed from 24 years to 26 years. Before the rule change, a soldier not promoted to sergeant first class within 24 years had to retire; now that soldier can serve 26 years. Changes include:

- SSgt.—23 years
- SSgt. (promotable)—26 years
- SFC—26 years
- SFC (promotable)—29 years
- First Sgt./MSgt.—29 years
- First Sgt./MSgt. (promotable) —32 years
- CSM/SGM—32 years

The Army also extended the maximum age limit for enlisted soldiers to 62. The changes apply to all active duty soldiers and to reserve component soldiers in the Active Army National Guard and Army Reserve. The new rules do not mean soldiers must stay in the Army longer. They must, however, leave the service at the time of their RCP or at age 62, whichever comes first.

Leaving Korea. The 1st Battalion, 2nd Aviation Regiment, known as the 1-2 Attack Reconnaissance Battalion (ARB), will relocate from the Republic of Korea to Fort Carson, Colo., in March. The battalion, one of two Apache reconnaissance battalions currently stationed in Korea, includes 24 AH-64 Apache Longbow helicopters and about 500 soldiers. The associated Aviation Intermediate Maintenance structure will also relocate. To temporarily replace the 1-2 ARB, the Pentagon will send 12 A-10 attack jet aircraft; an MH-53 helicopter detachment will also be deployed to Korea during fiscal year 2009.

The move from Korea will allow the Apache helicopter battalion to train and equip prior to deployment to Iraq in the fall and will help scattered family members consolidate until that deployment. The battalion will remain home-stationed at Fort Carson through the duration of the unit's rotations. Fort Carson's only aviation unit—the 1st Squadron, 6th Cavalry Regiment—is a Kiowa unit just returning from 14 months in Iraq and is scheduled to move to Fort Riley, Kan., in the spring. Fort Carson combat units will train with the incoming Apache unit but will not deploy with them.

New Scholarships Available. The University of Maryland University College (UMUC) has announced a new $200,000 scholarship fund that will provide financial assistance to its military students and their spouses in Asia, Europe and the Middle East as well as in the United States.

The fund will provide $1,000 tuition assistance per semester to spouses of enlisted, active duty servicemembers and offer $100 awards each semester to enlisted, active duty members of the U.S. armed forces to help pay for textbooks. All awards, which will be contingent upon the student maintaining predetermined academic standing, will be need-based and renewable.

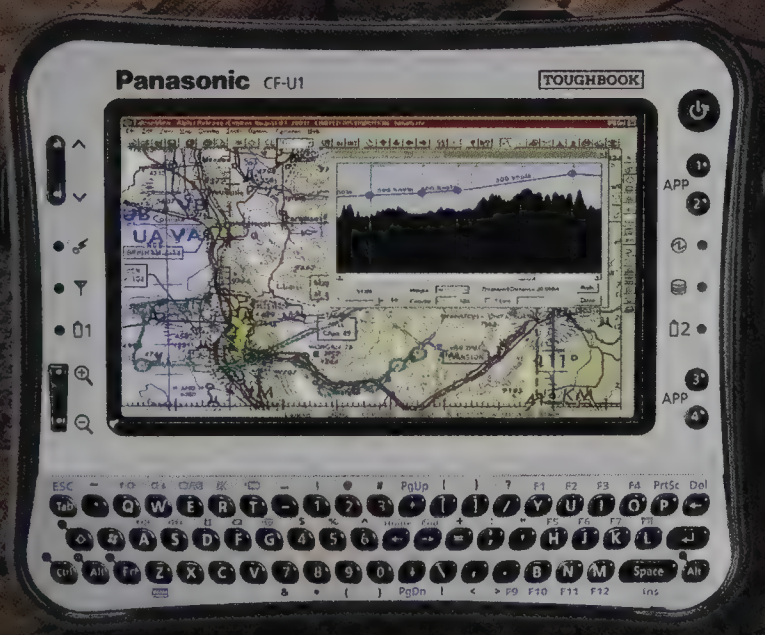
UMUC, which enrolls an estimated 60,000 military servicemembers, dependents and veterans annually, is under contract with DoD and is positioned to be among the first institutions to offer instruction to troops stationed in Iraq.

Soldiers and spouses stationed in Europe may e-mail Edna Roy at eroy@ed.umuc.edu for more information; those stationed in Asia may contact Michael Kulyk at mkulyk@asia.umuc.edu.

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Recruiting on the Web. The Army has redesigned its web site (goarmy.com) and added new features to boost recruiting. One new feature—"Straight from Iraq"—allows potential recruits to interact directly with troops deployed overseas. Visitors to the site can type in questions that are answered personally by individual soldiers in a series of webcasts. Soldiers' portraits appear at the bottom of the web page, and potential recruits can click on various photographs to obtain answers to questions that appear superimposed on the pictures.

The feature promises "real soldiers, real answers," and its goal is to make the Army and the benefits of serving in it more relevant to the group the Army is aiming to recruit—Americans ages 17 to 24. It is the first time the site has featured the war in Iraq prominently and referred to it so directly.

New Web Sites. Recently launched web sites will help soldiers stay in touch and find information. The Pentagon launched a site called TroopTube at which families can upload and share videos. The site requires users to register, but anyone can sign up. Unlike YouTube, MySpace and 10 other networking entertainment sites banned by the Pentagon because they take up too much bandwidth, TroopTube can be viewed on official computers. For more information, visit www.trooptube.tv.

A collaborative effort of the Departments of Defense, Labor and Veterans Affairs, the National Resource Directory at www.nationalresourcedirectory.org is a one-stop source of federal, state and community-based resources for wounded, ill and injured soldiers, veterans and their families as well as families of the fallen and those who offer them suport. The site provides more than 10,000 medical and nonmedical resources and services, including printable forms.

Funded by the Defense and Veterans Brain Injury Center, www.BrainLine.org is a 24-hour resource for people who have sustained traumatic brain injuries and their families, friends and caregivers. The site explains what kind of treatment and support are needed, provides answers to frequently asked questions and offers recent research, coping strategies and articles.

One Freedom, a troop-support group that provides education on the brain and body's natural reaction to stress and conducts workshops and training on how to deal with subtle, chronic and acute stresses, recently launched a redesigned web site that contains videos and numerous online resources. The site notes that workshops and retreats are free of charge to OIF and OEF veterans and their families. The address is: www.onefreedom.org. ★

GENERAL OFFICER CHANGES*



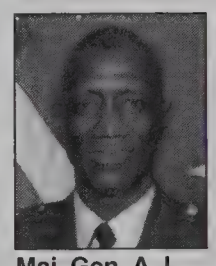
Maj. Gen. J.J. Dorko, USACE, from Cmdr., Gulf Region Div., OIF to Dep. CG for Military and International Ops., Washington, D.C.



Maj. Gen. J.W. Rafferty, USAR, from Cmdr. (TPU), 89th RRC, Wichita, Kan., to Spec. Asst. to the Cmdr., U.S. NORAD/NORTHCOM for Reserve Matters, Peterson AFB, Colo.



Maj. Gen. M.W.B. Temple, USACE, from Dep. CG for Military and International Ops. to Dep. CG for Civil and Emergency Ops., Washington, D.C.

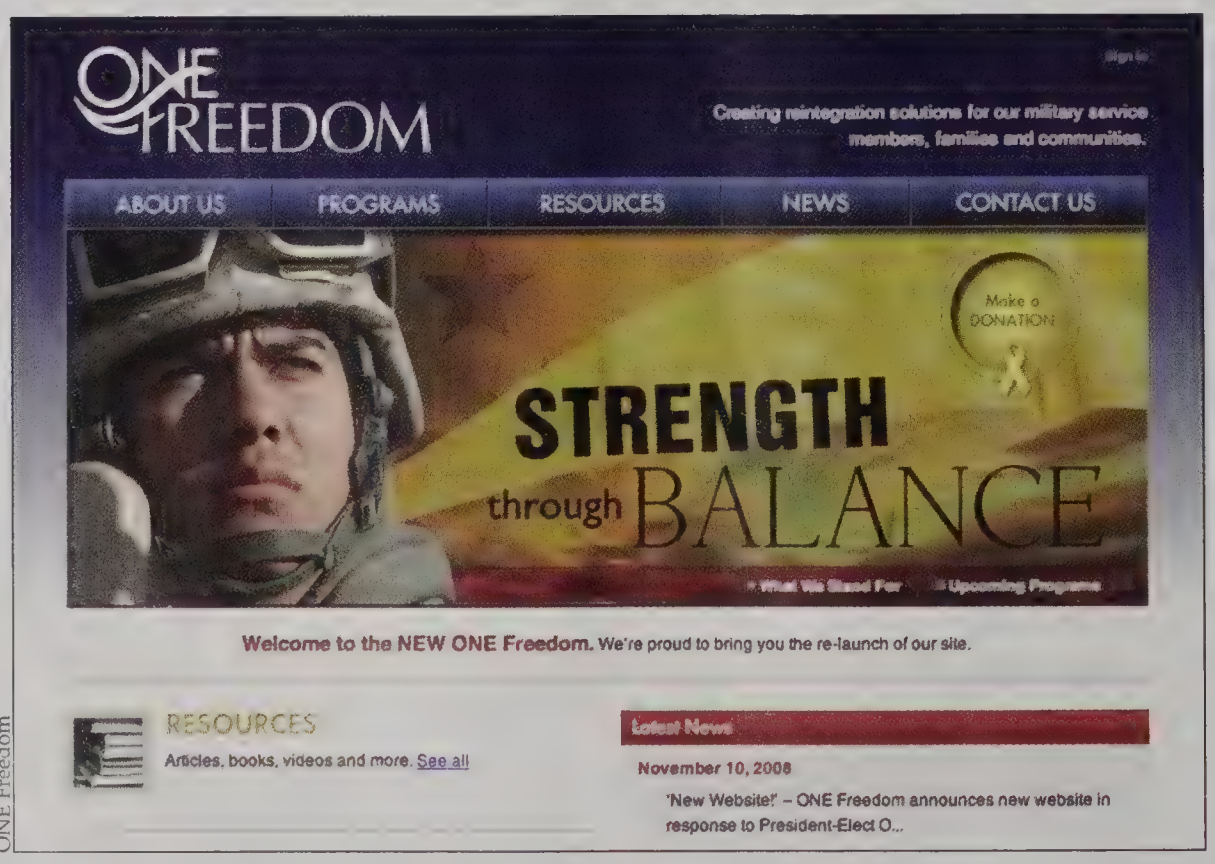


Maj. Gen. A.J. Turner from Dep. CoS, G-3/5/7, TRADOC, Fort Monroe, Va., to CoS, USSTRATCOM, Offutt AFB, Neb.

Brigadier Generals: **A.W. Batschelet** from CoS, 4th Inf. Div. (M), CoS, MND-B, OIF to Dep. CG, 4th Inf. Div. (M), Fort Carson, Colo.; **D.C. Leins**, USAR, from Cmdr. (TPU), 2nd BCTB, 75th BCTD, Fort Dix., N.J., to Dep. Cmdr., JTF-HOA; **R.P. Swan** from Dep. CG (Spt.), 4th Inf. Div. (M)/Dep. CG (Spt.), MND-B, OIF to Dir. of Strategy, Plans and Policy, ODCS, G-3/5/7, Washington, D.C.

***BCTB**—Battle Command Training Brigade; **BCTD**—Battle Command Training Division; **JTF-HOA**—Joint Task Force-Horn of Africa; **MND-B**—Multi-National Division-Baghdad; **NORAD**—North American Aerospace Defense Command; **NORTHCOM**—U.S. Northern Command; **ODCS**—Office of the Deputy Chief of Staff; **OIF**—Operation Iraqi Freedom; **RRC**—Regional Readiness Command; **TPU**—Troop Program Unit; **TRADOC**—U.S. Army Training and Doctrine Command; **USACE**—U.S. Army Corps of Engineers; **USAR**—U.S. Army Reserve; **USSTRATCOM**—U.S. Strategic Command.*

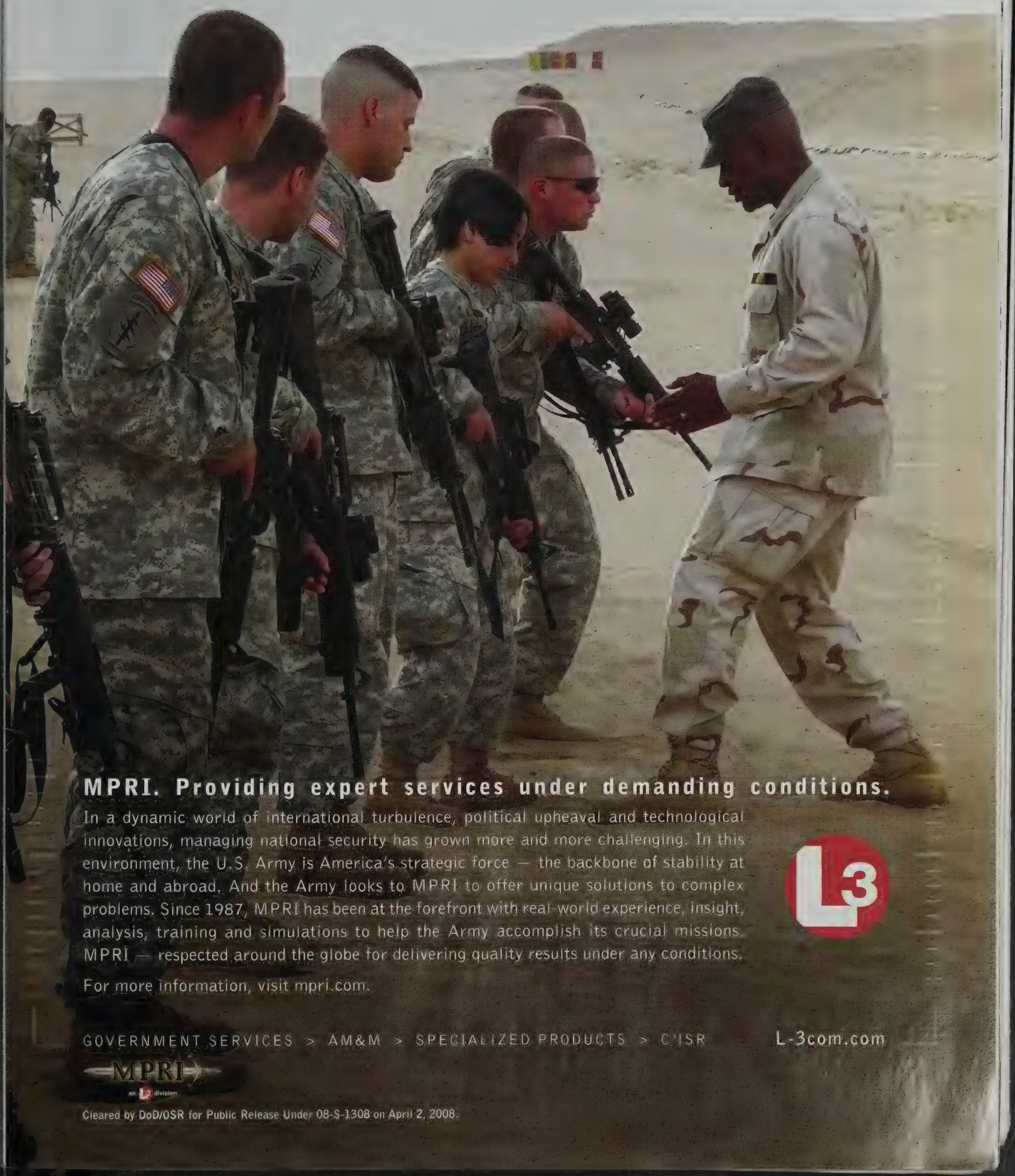
**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*



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Welcoming the Overdue Resurrection of Deterrence

By Richard Hart Sinnreich

During the past few months, folks attentive to national security matters have been hearing and reading a good deal about a defense concept that largely faded from public view after 9/11: the concept of deterrence.

In late October, concluding a speech to the Carnegie Endowment for International Peace devoted largely to the need to refurbish our aging nuclear weapons stockpile and improve its oversight following a series of highly publicized missteps, Defense Secretary Robert Gates turned to what he called "the broader implications of deterrence in the 21st century."

"There can be little doubt," he noted, "that the post-Cold War world offers a new strategic paradigm for nuclear weapons, and particularly for the concept of deterrence." The problem, he pointed out, is how to deter "rogue regimes that threaten their neighbors and our allies" and "weapons passing from nation-states into the hands of terrorists."

Like containment, the national security strategy with which it was inextricably associated, deterrence was America's central military objective throughout most of the Cold War. Although pursued in different ways, and those not invariably sensible or convincing, deterrence in one form or another largely guided the nation's military planning until the collapse of the U.S.S.R. removed its principal target.

The foundation of America's deterrence strategy throughout that period was our nuclear posture. While the adoption of "flexible response" in 1961 sought to broaden the nation's military options, reducing dependence on the nuclear threat, the Pentagon continued until the end of the Cold War to devote both policy and programmatic attention to sustaining a credible deterrent posture.

That changed significantly after 9/11. Convinced that Secretary Gates's rogue regimes and terrorists couldn't be deterred by the threat of military retaliation, nuclear or otherwise, the new administration turned instead to a defense strategy it called *preemption,* in effect abrogating America's long-standing reluctance to engage in preventive war.

Introduced by President Bush in a speech at West Point in June 2002 and formalized in a revised National Security Strategy later that year, preemption reflected the administration's view that "containment is not possible when unbalanced dictators with weapons of mass destruction can deliver those weapons on missiles or secretly provide them to terrorist allies."

Instead, President Bush argued, "We must take the battle to the enemy, disrupt his plans and confront the worst threats before they emerge," taking "preemptive action when necessary to defend our liberty and to defend our lives." The exemplary case, of course, would be Iraq, and the unhappy result almost certainly is one of the factors responsible for the Pentagon's renewed attention to deterrence.

It's by no means the only one, however. Even as U.S. leaders seek an acceptable way to extract us militarily from Iraq and stabilize a deteriorating Afghanistan, long-standing concerns about China's expanding military power have been compounded by threats of nuclear proliferation to North Korea and Iran, and more recently by Russia's growing international truculence.

Under the circumstances, it's not all that surprising that a Secretary of Defense who entered government in 1966 and spent the next twenty-odd years successfully implementing containment and the deterrent strategy underwriting it should look for ways to resurrect the latter, if not the former.

Deterrence means persuading a potential enemy to refrain from aggression. Its prerequisites were classically articulated years ago by William Kaufman, then a Princeton University professor. Successful deterrence, Kaufman argued, requires convincing a potential enemy that any aggression would incur an unacceptable cost. In turn, that requires both the military capability to inflict that cost and the unmistakable intention to do so should deterrence fail.

Those requirements haven't changed. What has changed, as Secretary Gates rightly pointed out, is the challenge of deterring potential aggressors, whether autocratic regimes or stateless terrorists, like Osama bin Laden, who either lack a population and possessions to threaten or have no scruples about jeopardizing them.

Those qualities certainly complicate deterrence and urge a broader range of military responses than outright war, nuclear or otherwise. But they don't diminish in any way the central argument for relying on a deterrent strategy, which is what should be the abundantly apparent weakness of the alternative.

As this column noted long before we invaded Iraq, we pay a price for being who we are. Part of it is accepting that the risk, however painful, that an enemy may take the first shot is much less costly in the end to America's unity, determination and self-respect than shooting first ourselves, however tempting that may be. From that perspective, if no other, Americans should welcome the renewed concern for deterrence. □

RICHARD HART SINNREICH writes regularly for The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the November 16, 2008* Lawton Constitution *and is reprinted by permission of the author.*

William G. Bainbridge, 5th Sergeant Major of the Army, 1925–2008

William G. Bainbridge, the fifth Sergeant Major of the Army and a former member of the Association of the U.S. Army's Council of Trustees, died in November in Palm Bay, Fla., at the age of 83.

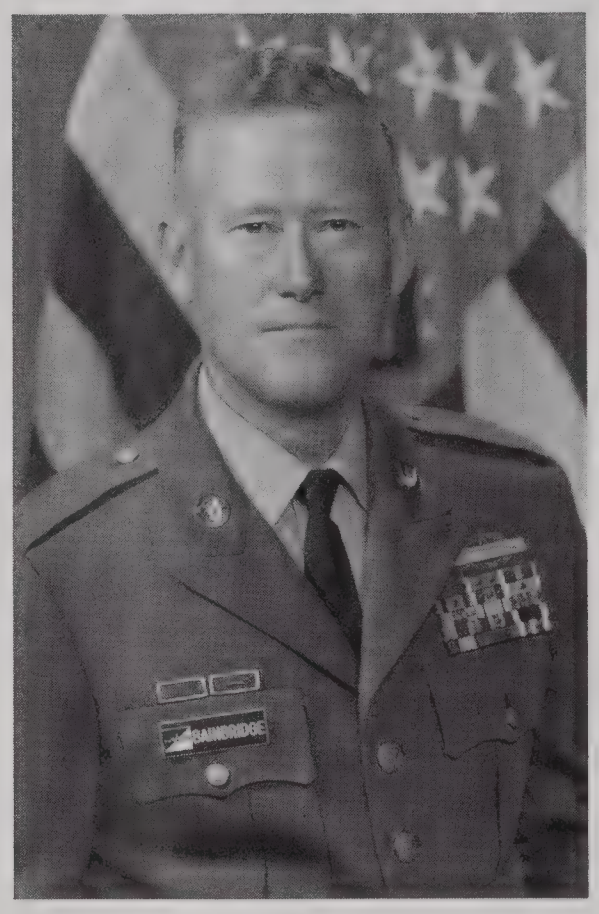
AUSA President Gen. Gordon R. Sullivan, U.S. Army retired, said: "The U.S. Army and our nation have lost a courageous, history-making American, soldier-warrior and noncommissioned officer who served his country with dedication and humility—both in and out of uniform—for more than 65 years. I am proud to have served with a man of such stature who was respected and admired by all those he touched."

"Bill Bainbridge was a mentor and role model for several generations of soldiers, noncommissioned officers and officers," said CSM Jimmie W. Spencer, U.S. Army retired, director of AUSA's noncommissioned officer and soldier programs.

Recognizing Bainbridge's unparalleled contributions to the Army, its soldiers and noncommissioned officers, in 2000, AUSA's Council of Trustees instituted the Sergeant Major of the Army William G. Bainbridge Noncommissioned Officer Distinguished Service Medal, awarded annually at AUSA's Annual Meeting and Exposition to the noncommissioned officer—active, reserve component or retired—who has contributed the most to the Army NCO Corps. The first medal was presented to Bainbridge, and the citation read in part: "His leadership and mentoring have had a positive and lasting effect and have shaped the Army Noncommissioned Officer Corps of the 21st century."

Born and raised in Illinois, Bainbridge volunteered for the draft and was inducted into the Army in June 1943 at age 18, weeks after graduating from Williamsfield High School.

After completing basic training, Bainbridge took flying lessons at the University of South Dakota at Grand Forks, then continued his flight training in Santa Ana, Calif., until the Army, preparing for the Allied forces' invasion of France, transferred him to ground duty and to Company A, 423rd Infantry Regiment, 106th Infantry Division—the last division organized for service in World War II.



SMA William G. Bainbridge

After crossing the English Channel and moving through France and into Germany, the 423rd arrived at a location where the German army had completed its force buildup for the Ardennes offensive—known as the Battle of the Bulge—fought on the German-Belgium border.

The regiment held for a time but was eventually overrun and overpowered by German forces. Bainbridge was captured and held as a prisoner of war until liberated by the 6th Armored Division on Good Friday 1945. He said: "My love of country, the way I was brought up, my family life helped sustain me."

Returning to the United States, Bainbridge was soon discharged and reentered the family business—farming. Joining the U.S. Army Reserve while farming in Illinois, he was called to active duty as a staff sergeant at the outbreak of the Korean War. Bainbridge remained stateside and served in a variety of personnel and administrative positions. He was promoted to sergeant first class and enlisted in the Regular Army with the intention of becoming a career soldier.

Following a variety of assignments in the United States and Stuttgart, Germany, and several promotions, Bainbridge became a battalion sergeant major with the 1st Infantry Division and was eventually deployed with the division to fight in Vietnam in War Zone C, north of Saigon. Later he became the sergeant major of the newly created II Field Force in Vietnam.

Back in the United States, with his wartime experiences and his ground-combat savvy, he was selected first as the sergeant major of the U.S. Army Infantry School at Fort Benning, Ga., then of First U.S. Army at Fort Meade, Md., and, later, of U.S. Army Pacific, Fort Shafter, Hawaii.

In 1968, the Command Sergeants Major Board chose Bainbridge to become one of the first command sergeants major in the Army. With his broad background, his knowledge of Army operations in both peacetime and war, and the necessity of developing a comprehensive education system in the Army for noncommissioned officers, Bainbridge was selected as the first command sergeant major of the newly formed Sergeants Major Academy at Fort Bliss, Texas. After three years in this historic position, Bainbridge became the fifth Sergeant Major of the Army, serving with Army Chiefs of Staff Generals Frederick C. Weyand and Bernard W. Rogers.

Among his many accomplishments in this office, Bainbridge believed that gaining permanent funding for the Noncommissioned Officer Education System was his greatest contribution. He said that command sergeants major and all senior noncommissioned

officers are first and foremost teachers, and in this role they are vital to the success of the mission.

On June 18, 1979, Bainbridge retired at a ceremony at Fort Myer, Va., as the senior Army noncommissioned officer and the primary adviser to the Army Chief of Staff on enlisted issues.

After he retired, he served as secretary to the Board of Commissioners of the Soldiers' and Airmen's Home in Washington, D.C., and as its director of member services.

He is survived by his wife of 63 years, Hazel Smith; two daughters, Kathryn L. Koop and Mary B. Moore; two grandchildren, Karrie and Ryan; and four great grandchildren, Shane, Kodie, Khamry and Peyton.

A service was held in Palm Bay on December 5, and interment will be with full military honors at Arlington National Cemetery. □

The 'How' Counts ... A Lot

By Lt. Gen. James M. Dubik
U.S. Army retired

Most of us spend a great deal of time attending to our "to do" lists. Some of us have lists of what we want to accomplish for each day, for the week and for the month. Some even have lists of semiannual and yearly objectives.

How we carry out tasks that we list for ourselves (or tasks on lists we receive from others) matters and matters a lot. *How* we lead or manage will either strengthen or weaken the core of our Army, its soul and its heart. I don't mean *soul* or *heart* in either a religious or medical sense. Rather, I suggest only that we understand our soul and our heart as that which distinguishes our Army from other armies: what makes us who we are.

From this perspective, our soul, I believe, has three parts: our training methodology, our values and our NCO Corps.

We train differently from any army with which I am familiar. Our focus is on performance-oriented training: Do the task; don't just talk about it. Our methodology requires leaders to identify a task or set of tasks upon which individuals, other leaders or units are to train, set the right conditions in which the identified tasks can actually be done, and evaluate the execution of the tasks to a published set of standards. If the tasks are performed to standard, training is complete. If not, training continues until they are done to standard. All training is followed by an after action review so that all involved can learn not only what happened, but also why. Continuous learning by doing is the core of the U.S. Army training methodology. We are hard on ourselves when we train and when we conduct after action reviews.

When we train this way, we strengthen this part of our soul. When we don't, we weaken it. The longer and more consistently we train this way, the more we strengthen and transfer this part of our soul to future generations of soldiers and leaders. Conversely, the more we digress from our training methodology, the more we grow into a different army and the greater the gap between what we say as an organization and what we actually do.

The second part of our Army's soul, our values, consists of leadership, duty, respect, selfless service, honor, integrity and personal courage, both physical and moral. We create the trust that is so important in our profession when each of us, whether soldier or leader, acts consistently with our organization's values. These values are designed to govern everything we do. As with training, when values govern our actions, we strengthen this part of our soul and transfer it to the next generation of soldiers and leaders. And, once again, each time one of us strays from acting consistently with our values, we erode that trust, even if by just a little bit.

The third element of our soul is our NCO Corps. Ours is the greatest NCO Corps on the face of the Earth—made great because of the responsibility we give to NCOs, because of our select-train-promote model of NCO development and because of our outstanding NCO education system. I entered the Army at a time when our Army's NCO Corps was nothing compared to what it is now. I witnessed junior and senior officers and sergeants fight to rebuild the NCO Corps. We all see the result: an NCO Corps that is the envy of many other armies.

When we take our NCO education system seriously by continually updating it and sending our sergeants to school—even if doing so creates a short-term gap in our unit—when we hold our NCO selection boards on time and choose the right soldiers for promotion, and when we give our NCOs the responsibility they should have in garrison as well as in combat, we strengthen this part of our Army's soul. When we don't, we weaken it. The longer and more consistently we weaken our NCO Corps, the more we risk becoming a different army and the more we grow the gap between what we say and what we actually do.

The tasks on our to do lists are important, but equally important is how we carry out those tasks. If we as leaders are very efficient at checking off our tasks, but we gain that efficiency by taking shortcuts in our training methodology—cheating a bit on one or more of our values, usurping the authority of NCOs, or interfering with NCO promotion or education—then our leadership is counterproductive to the long-term health of our Army's soul.

And the heart of our Army? Our spouses and volunteers. Think of what sterile environments our posts would be and how dull our units would be without the contributions of our spouses and volunteers. Their contributions create the communities

in which we live and raise our children.

Communities are more than an aggregation of people living in proximity. Communities are formed by neighbors who care for one another, who look after one another and who help one another. This is the huge contribution that our spouses and volunteers make. The communities they form are not just local communities within units or posts. By tying into formal Army organizations and processes, our spouses and volunteers form communities across the Army to the benefit of us all. Our lives are richer because of the commitment and contribution made each day by spouses and volunteers.

What do they ask in return? Not much. Leaders, however, need to acknowledge their contributions and honor their commitment. Here again, we leaders must ask ourselves: As we do things on our to do lists, are we doing them in such a way that we are strengthening or weakening the heart of our Army?

Each time we recognize the contribution and commitment of a spouse or volunteer, we strengthen our heart. The more we do so, the stronger our heart becomes. Formal recognition ceremonies are important in this regard; leaders at every echelon should attend them. Informal, small, daily recognitions by the leaders of the echelon at which the spouse or volunteer makes the contribution, however, may be even more important. All of us want our contributions to be recognized by those for whom we are making the effort; spouses and volunteers are no different.

If we leaders are very efficient at checking off our tasks, but we gain that efficiency at the expense of not taking the time to acknowledge and honor the contributions of spouses and volunteers, then our leadership is counterproductive to the long-term health of our Army's heart.

Making to do lists and driving ourselves and our organizations to accomplish what's on them is important. Making things happen is one of the keys to successful leadership—assuming, of course, that the things we're making happen are the right things and that we are making them happen in the right way. That's the point. A leader can measure pretty well whether he or she is making the right things happen. It's usually visible in the short term, for example, in a quarterly training brief, a unit status report or a monthly maintenance report. It's harder, however, for a leader to see whether he or she is making things happen in the right way—whether he or she is strengthening or weakening our Army's soul and heart. That requires a longer view, a different perspective.

Understanding that our Army has a soul and a heart provides a framework that encourages that longer view and perspective. The framework is useful to remind each of us that we are responsible for our part of the soul and heart associated with our scope of responsibility. Ten years from now, will our leadership and management have contributed to strengthening our Army's soul and heart or weakening them? The answer to that question is affected every day in how each of us does what we do as leaders. Leaders at every level—officer and NCO—are the only guarantee that our Army's soul and heart will be strong. *How* we do what we do matters, and it matters a lot. □

LT. GEN. JAMES M. DUBIK, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.

Military Power: The Logic for Keeping and Using Arms

By Brig. Gen. Huba Wass de Czege
U.S. Army retired

Any discussion of grand strategy must begin with a common understanding of the finer points of the eternal logic for keeping and employing arms. Western political elites responsible for recent defense policy have been sadly innocent of this field of knowledge, believing that new weapons and modern concepts have overturned ancient wisdoms.

Strategy is the central and unique idea that pursues the ends of an intervention by using specific ways and means to exploit the unique characteristics of the given situation. We "appreciate" the particulars of the case, design a "best fit" strategy and tailor the form of the intervention to suit the case. This means we replace the strategic formula with design. As long as other states or groups exist and are capable of advancing hostile agendas by violent means, they will keep arms and the ability to use violence to serve them in four essential ways: to *deter* others from using arms against them; to *defend* themselves when others attack; to *attack* others; and to *pacify* armed internal subgroups. These basic purposes apply to nation-states and alliances of states as well as modern tribes, clans and families when states do not exist or fail to secure their safety and property, as in ancient days. It also applies to stateless political and criminal movements, as well as to state-based insurgent movements. Success in deterrence, defense, attack and pacification requires a logic unique to each. Knowledge of the finer points of this logic is not widespread among modern Western political elites, judging from recent history. And we have suffered for it.

Deterrence

Military capability-in-being deters others from using force to advance their own hostile ends. The mere existence (without the need to act) of sufficient capabilities can guarantee a status quo and free the state from co-

ercion by the violent threats of others.

The art of deterring is based on understanding only two fundamentals. Deterrence, like beauty, is in the eye of the beholder. The image he sees must count toward a judgment of deterrence. As difficult as it might be to project the fully deterring image, under the right circumstances such images of a military force-in-being exert the power to influence events as usefully as any other. In fact, a properly constructed deterrent is the most economical use of military capability; a well-designed deterrent is a less costly way to preserve the status quo than to be forced to defend it. In many cases the same military force standing in "uncommitted" readiness can project a deterring image to more than one potential adversary when an active diplomacy prevents collusion among them. In a strategic sense, such forces are hardly uncommitted.

Deterrence is wholly psychological. What matters is the image, not the reality. For example, if Country A can convince its neighbors that it has a terrible weapon which it would unleash if attacked, then it need not actually have it—maintaining the illusion of having it is enough.

The second fundamental of deterrence is that the deterrence value must exceed the threshold of acceptable cost in light of anticipated gain. Humans generally value life and limb, especially their own or those of people they know and care about. Historically, however, political leaders have bargained the lives and limbs of their citizens, up to a point, for ends they value more. Policemen, firemen, airmen, sailors, marines and soldiers risk life and limb daily to do their duty.

It is equally important to appreciate that some people, in some circumstances, simply cannot be deterred. In fact, in some societies individuals willingly sacrifice life and limb because the reward for the sacrificial act itself is greater than the goal for which it is offered. Such attitudes confound the usual logic of deterrence, as with today's Islamic fundamentalist suicide bomber.

In every case, a deterrent has to be tailored specifically to those people who are most likely to decide whether or not to act. The projection of deterring images plays an important complementary role in all other uses of military force at all levels, from the grand strategies of nation-states to the single combat of armed individuals. For instance, a force could more easily pursue any number of intentions merely by positioning a detachment of force just large enough to check several options of its opponent. The art, of course, is to know how to project the right image so that it is appropriately recognized and therefore sufficient.

Defense

When deterrence is not enough to check the several options of each of several equally potent dispersed enemy forces, the first fallback is to defend and thus buy time for other options.

Military capability employed defensively is the status quo guarantor of last resort. When deterrence, com-



bined with diplomacy and all other peaceful means, fails to preserve the status quo, people will fight others to preserve it. These others who choose to use force rather than peaceful means to change the status quo may be external powers, internal insurgents or a combination of both, as in the Vietnam War.

Like deterrence, defense has its own peculiar logic. While deterrence depends on the adversary's interpretation of an *image* of potential, what matters in the art of defense is the *real* potential and how best to bring it to bear in order to defeat the attack.

In general, it is less costly for the defender to retain the status quo than it is for the aggressor to change it. All other things being equal, the defender merely has to cause the attack to fail to achieve its aim. Well-prepared defenses tend to improve the reach, accuracy and protection of weapons and the morale of their operators. Those who defend their home turf usually know the ground better, can find concealed positions and are more likely to surprise their opponents.

During the 20th century, military professionals widely believed—and often proved—that tactical military forces defending a position could deny success to a force three times as large if they were equal in quality, composition and leadership. This, of course, is not always true. Small, determined, poorly armed but well-led defenders have held off capable forces exponentially larger than themselves. A relatively poor, small nation without aggressive designs but strong determination can create a strong defense against invasion by combining its geography and its infrastructure of cities, towns, canals, roads, railroads and other man-made obstacles to make military invasion difficult. In addition, its regular forces can specialize in one thing—defense of their homeland. Finally, the defender can create an inexpensive paramilitary "home guard" that complements the regular force by avoiding and hiding from the attacker's strength only to emerge after being bypassed to attack supporting forces and functions, the intent being to avoid losing as long as possible in the hope of a negotiated peace or some other kind of relief.

The challenge and major preoccupation of the defense is to seize the initiative from the attacker and to cause the attack to culminate before it succeeds. Successful defense depends on leveraging inherent advantages: better knowledge of the country; increasing vulnerability of the attacker's logistics and other supporting structures as these extend into the defender's country; the support of the population for regular, paramilitary and irregular defenders; and the greater motivation of fighting for home and family. (Just because a regime is unpopular doesn't mean it can't claim the "home-court advantage" against foreigners.) These advantages, when aimed systematically at eroding the attacker's momentum and constraining his freedom of action, cause the attack to culminate. The problem then is to restore lost towns and territory through counteroffensive action, perhaps with the aid of allies who, by this time, have managed to respond. When this is not possible, counteroffensive action can be begun "underground" by initiating a resistance movement. Early initiation of guerrilla action and subversion in occupied areas can cause the attack to culminate short of victory and then provide leverage to the conventional counteroffensive. This can also establish the basis for a viable insurgency.

This struggle is also a contest of will. Success by either side in the physical clash hardens will. Early losses dishearten the attacker disproportionately because they suggest misjudgments about the defender's potential and cast doubt on other judgments yet to be tested. The defender must capitalize on these.

In the contest of will, evidence of success or failure indicates a trend and foretells the future. Evidence of a coming culmination of the attack short of success emboldens defenders and depresses attackers. In the contest of will, time is on the side of the defender: The attacker needs to complete his business before the people at home tire of the effort; the defender merely needs to outlast the attacker and deny him his goal.

Ultimately it is the defender, not the attacker, who decides when to end the fighting, and he does so when either of two conditions occur: He has given up hope of success, or the attacker has eliminated all means of resistance. All of these factors combine to support Clausewitz's assertion that defense is the stronger form of war.

Attack

Military forces also fight to change the status quo when persuasion, compensation, bribery and intimidation fail and others choose to defend it by force. This is the purpose of offensive wars, campaigns, battles and even offensive engagements within defensive wars.

Offense has its own peculiar logic as well. For instance, to change the status quo is the most ambitious of all intended uses of military forces, requiring the most preparation, effort, expertise and good luck.

What matters in the art of attack is also *real* potential and how best to bring it to bear in order to defeat the defense. Once launched into his enterprise, the attacker will test his own potential against the image that failed to deter.

To counter the defense's strengths, the attacker has the advantage of deciding when and where initial engagements will be fought. The defender is obliged to react and either shift and expose reinforcing forces or meet local attacks with inferior forces in prepared positions.

All offensive endeavors—any effort to change the status quo—require a two-armed approach. One arm communicates threats or inducements aimed at the intellect, or will, of the opposing chief decision makers. Such communications—whether through actions, words or images—are intended to shape decisions and elicit desired responses. For best results, the intended recipient must perceive the communication, understand it and interpret it in such a way that the mes-

sage compels him to act in the way intended by the sender.

Because of the extraordinary difficulty of achieving the desired change in the status quo through this arm alone, the other arm must act to force the desired change in the status quo regardless of the decisions or actions of the opponent. This arm creates new and very relevant facts, sometimes in plain sight, sometimes hidden until a new reality is in place.

The real enemy of the attacker is culmination before ends are achieved. Sound intelligence is vital to the attack: Misjudging the situation is the most frequent cause of premature culmination. While understanding physical systems such as transportation, industrial, financial and communications infrastructures is challenging for modern intelligence, it is relatively easy compared with learning how a complex society will react to attack. The logic of such networks can only be learned through a combination of very intrusive intelligence sources prior to action and purposeful interaction during offensive operations. Even then, it is imperfect.

The single advantage of the offense over the defense is having the initiative to optimize all available potential, but knowing what potential is available and relevant and how to optimize it depends on a sound theory of the situation. Such theories then become the provisional "truth" upon which optimum plans are made and actions taken. The trick is to understand the provisional nature of such truths and revise them as the situation changes and learning takes place, adapting plans and actions accordingly.

All of this takes time, which is the enemy of the impatient attacker. The traditional answer to such complexity has been shock and overwhelming force, simplifying complexity by treating much of it as irrelevant. Such methods require the willingness to accept heavy collateral damage and the potential loss of internal allies as the acceptable price for the desired change in status quo. The alternative is to be patient, but modern democratic states lack patience when wars are costly, and they have difficulty accepting the heavy collateral damage associated with traditional ways of simplifying complexity. Nonetheless, when sufficiently aroused, modern democracies will send their troops to war for a change in the status quo, even though they do not fully comprehend the complexities they will encounter. So will violent political movements, tribes and clans, and when that happens, it pays to understand the logic of the offense and its dilemmas.

Pacification

The fourth basic purpose of military forces is pacification. Pacification is necessary because groups of people within a state have gone to war and normal policing agencies can no longer enforce the peaceful and lawful behavior of potentially hostile forces, warring factions or violent criminals.

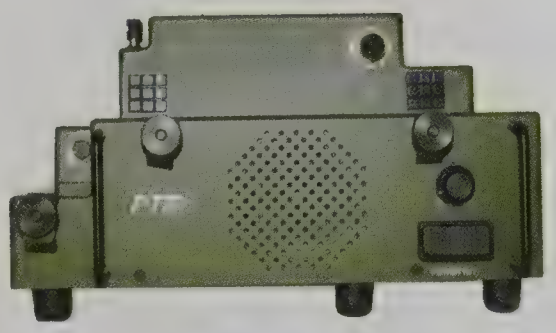
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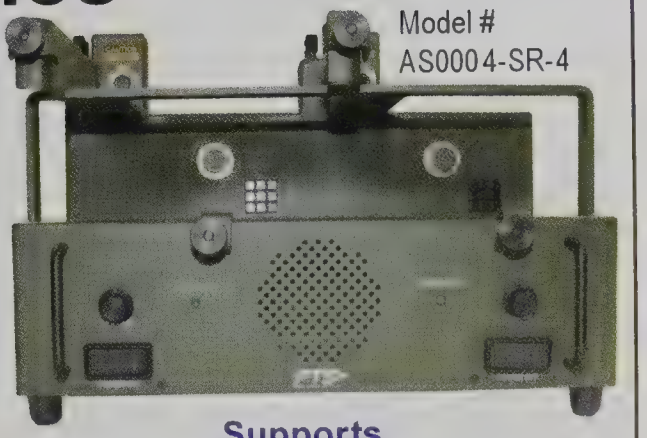


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ing force, often exterminating offending cities, towns, villages, ethnic groups, tribes or clans to eliminate the source of resistance swiftly—at least for a generation—and to "advertise" a deterring example. Pacifying the "old-fashioned way" does not work for modern democratic states that hope to remain influential and popular in this transparent, globalized world. (Weak states are still compelled to wage war on their insurgents.)

This means compensating in two ways, both difficult. First, the armed forces of the state have to seize the initiative from the strategic level down to the tactical, and their application of force must be very focused and discriminating. This means knowing the enemy very well, having very good intelligence and being more creative and strategically savvy than he. In addition, the state has to separate the enemy from the support of the people; it must know the people and retain their trust. The worst possible conditions for making war on irregulars occur in the wake of changing regimes, when the fundamental choice of legitimate government is between a foreign occupier and a homegrown competitor. The key to regime change is not the knocking down of the regime and its forces, but immediate pacification of the resultant power vacuum.

The principle of policing violence is to suppress it (and resulting property damage) to tolerable levels by creating and reinforcing the perception that perpetrators will face a high probability of being caught and prosecuted and that there is no honor in this.

Pacifying unruly ungoverned space is very difficult; there are no shortcuts. It takes keeping people safe and getting them on the side of peace. It is also very expensive in terms of trained and armed manpower. Some studies, based on rare historical successes, have judged the price to be no less than 20 security personnel per 1,000 citizens. This approach also requires legitimate and efficient courts and prisons. It takes patience, even-handedness, and consistency of word and deed. The benefit, however, is that the state decides when "normal" is attained and when warring factions, as well as insurgents, have been integrated into a peaceful society.

The far more complex practice, and the one actually more common today, is simultaneously warring and policing in the same area of operations. This requires keeping straight whom you are fighting and with whom you are enforcing the law of the land; confusing the two incurs great penalties.

If the definition of power is the ability to influence human decisions and behavior, then the real root of military power is not destructive force but the constructive use of force alongside other instruments of power. □

BRIG. GEN. HUBA WASS DE CZEGE, USA Ret., a frequent consultant to the U.S. Army Training and Doctrine Command, was one of the principal developers of the Army's AirLand Battle concept and the founder and first director of the School of Advanced Military Studies, Fort Leavenworth, Kan.



What Goes on in Theater Stays in Theater?

By Lt. Col. Joseph Doty and Maj. Shawn Tenace

There is an unfortunate, underground and mostly unspoken saying among some members of the military concerning temporary duty (TDY): "What happens on TDY stays on TDY." This certainly is not the norm in our military, and this expression is often said in jest; unfortunately, however, there is some truth in it. The connotation of this saying is, quite plainly, that "everything and anything goes," except for talking or revealing anything about any indiscretions upon returning home (or to the duty station). The general idea is that soldiers can live second lives on TDY and return home without any repercussions. This is simply unacceptable, and it runs counter to our professional military ethic. The most widely publicized incident of this type of behavior was the U.S. Navy's Tailhook incident in 1991.

Segments of our military are suffering from a version of this same mentality in our current conflicts in Afghanistan and Iraq, and we could see the negative effects 15 years from now as our young officers, noncommissioned officers and soldiers gain rank and more influential leadership positions in the military. For example, if the truth had not been made public, the scandal at Abu Ghraib prison and the deaths at Haditha might have fallen into a "black hole."

Moral and ethical indiscretions by deployed soldiers are not new and, for obvious reasons, are not often discussed. Leaders at all levels, however, should facilitate dialogue on these "unspoken" topics. The type of situational ethics that occur during deployment can be described as *bracketed morality*—certain types of values and ethics that only apply in certain situations (for example, "all is fair in love and war").

There is little argument that our current military force is more experienced, combat hardened, mentally agile, flexible, stronger, and technologically and tactically superior to any potential adversary. Our leaders are becoming more confident and agile, but those gains cannot come at the cost of being humble, disciplined and grounded in the basics. It is our argument that the current operational tempo of deployment has had the unintended consequence of skipping a fundamental developmental step, the building of basic military discipline. This is an enormous challenge to our junior leaders. This problem is now being compounded by earlier and higher promotion rates—for NCOs and officers. Are our soldiers losing basic discipline in multiple deployments in theater?

A current brigade commander in Iraq recently summarized this problem: "Our culture is threatened by the wear of this place," he says. "We must be careful. We have only a short time to



define the problem and determine a course of action, then it's 'game on,' in my opinion. The discipline that binds us used to be woven throughout everything we [did] and every step we [took] ... now it's just isolated to those [actions] that keep our buddies alive and out of trouble. This won't work in a noncombat environment. We have a whole new generation of troopers and junior leaders who don't know or understand the preglobal war on terrorism protocol or discipline that got us here."

This basic discipline is absolutely necessary and is the foundation for military units to be ethically sound and effective. It comes through time and multiple repetitions in compliance with high standards and repercussions for failure. Missing or overlooking these teachable moments simply because we are deployed can cost us in combat and counterinsurgency (COIN), in the struggle for positive media support and possibly in the future success of our military.

One example is the time a deployed senior staff sergeant stated: "I just want to kill someone, sir." If the leader does not immediately correct an undisciplined statement like this, then the discipline of the unit and its standards are jeopardized. Another example is allowing (or turning a blind eye to) soldiers being heavy handed with noncombatants and the civilian population. Without correcting these behaviors we have given our consent, and our discipline and control are lost. We write about the people as the center of gravity in COIN operations but often have not displayed the discipline to treat them appropriately. Soldiers will often become confused about acceptable and unacceptable patterns of conduct. Add the realities of combat, improvised explosive devices, direct fire, blood on soldiers' hands or a soldier's best friend's death, and the basic foundation of discipline to hold a position, assess the situation, rely on sound tactics and react appropriately becomes a matter of life or death.

Discipline can be defined as a consistent and predictable behavioral outcome as a result of education and repetitive training. Discipline is expected to produce a specific character or pattern of behavior, as a direct result of cognitive and moral development. Primary components are instinctive and controlled behavior as a result of disciplined and thoughtful education, training and self-control. Three common indicators of military discipline are unit performance, unit appearance and unit conduct.

Basic military discipline is an essential developmental process for junior leaders of all ranks. Discipline caught, taught or learned in initial entry training, the Reserve Officers' Training Corps, officer candidate school and the military academies is more of an enculturation into the military than the actual building blocks of discipline. It is difficult to assess initial entry unit or soldier discipline when every action and activity is planned, supervised and directed. Developing the type of discipline required to function in a complex COIN environment takes time and repetition. From a traditional paradigm, discipline can be built at the soldier and unit levels by some very mundane and monotonous tasks, the importance of which young soldiers might not understand. Conducting drill and ceremony training with an emphasis on individual attention to detail may seem outdated, but it will help to build discipline. Conducting two hours of drill and ceremonies, unit runs, in-rank inspections or parades is a developmental process that can take more than five years to understand and appreciate. New soldiers do understand, however—it is made very clear to them—that marching sharply is their duty to themselves and their unit. They understand that they are expected to perform crew drills over and over again until they achieve perfection because their platoon depends on them. They understand basic customs and courtesies in addressing senior NCOs and officers.

Conversely, there are other and less dogmatic ways to build this same discipline. Col. Casey Haskins, director of the Department of Military Instruction at the U.S. Military Academy, argues that the discipline necessary to build adaptive and flexible soldiers for this new era of persistent conflict requires innovative training methods that emphasize and reward initiative and nondoctrinal solutions. For example, tactical decision training where there are no "right answers" (standardized training by outcomes rather than by the process used to achieve them) is one way to develop this discipline and to teach soldiers how to understand and solve problems.

How this basic discipline is instilled is debatable; what is not debatable is its necessity. Indicators of discipline in a unit include a soldier's appearance and conduct. In addition, how well does the unit maintain and account for its equipment? How much attention to detail is emphasized on weapons systems crew drill training? How well does the unit comply with military customs and courtesies? How often does policing of the ranks (on-the-spot correction) occur in the unit when there are lapses in discipline?

At no other time in history have our discipline and ethical standards been put to the test as they are today in Iraq and Afghanistan. Discipline is even more important now because of the complexity and fog of the COIN war.

Is this issue a major problem or crisis for our military? It is difficult to assess. At the very least, however, we need open and frank dialogue on the subject. Leaders in our units, schools, training areas and day rooms should initiate nonattribution discussions that focus on where we are with this discipline and where we need to be. As professionals, we are responsible for self-correction and for providing honest critiques of ourselves. Criticizing the "what goes on in theater stays in theater" mentality would be a good start. □

LT. COL. JOSEPH DOTY is the deputy director of the Army's Center of Excellence for the Professional Military Ethic. MAJ. SHAWN TENACE teaches in the Department of Physical Education at the U.S. Military Academy.

The views expressed herein are those of the authors and do not purport to reflect the position of the U.S. Military Academy, the Department of the Army or the Department of Defense.

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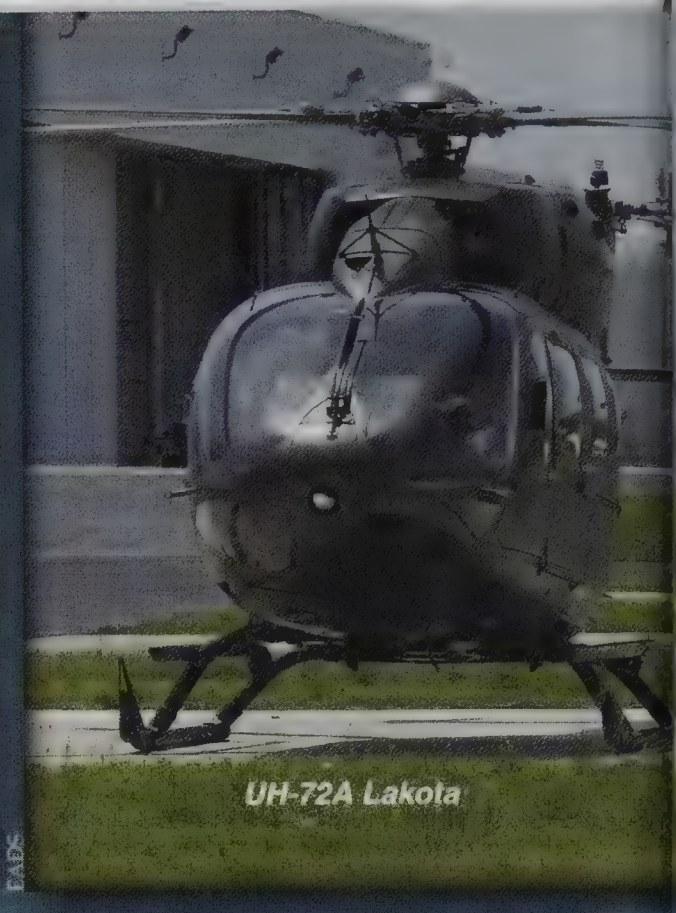
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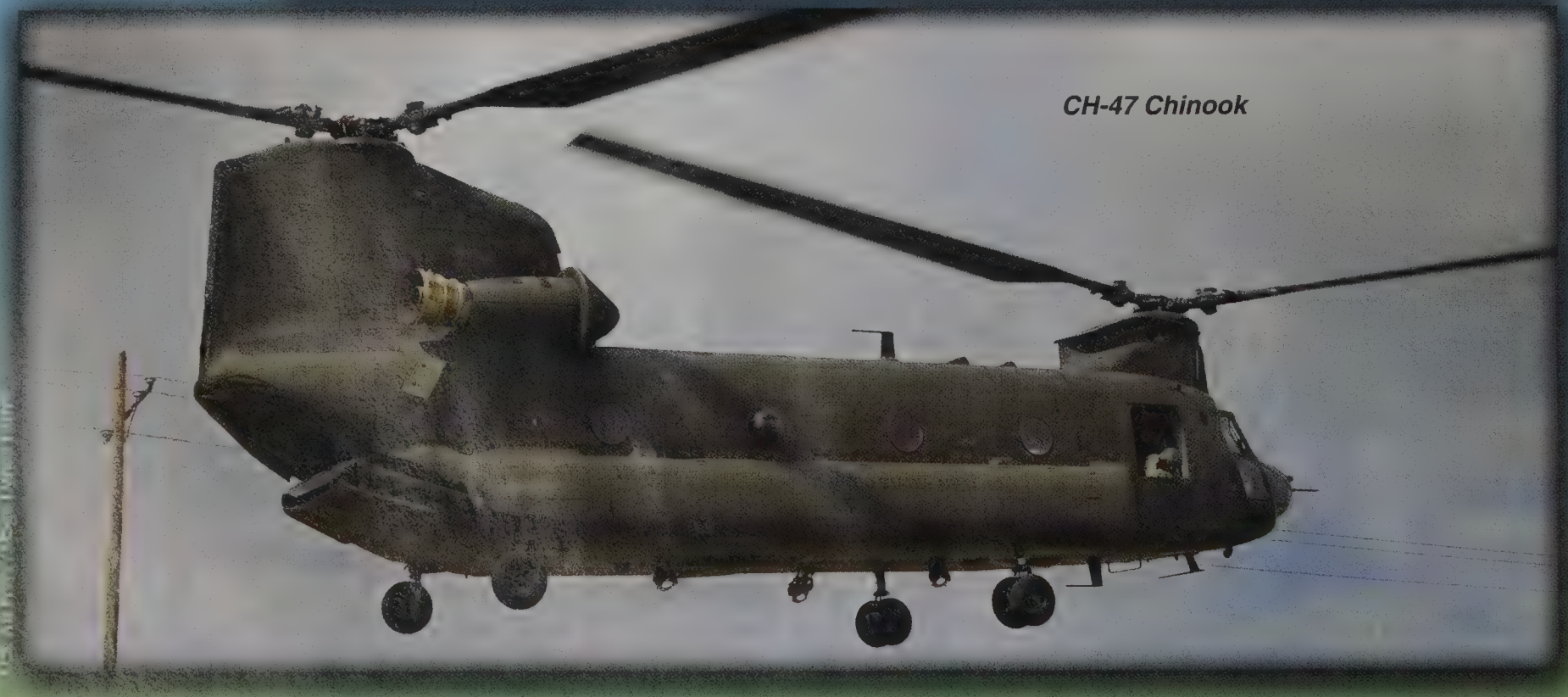
UH-72A Lakota

DARPA



Kiowa

U.S. Air Force/Staff Sgt. Samuel Bendet



CH-47 Chinook

U.S. Air Force/Staff Sgt. Jason Tudor





AH-64D Longbow Apache

Aviation Update:

Army Aviation at a Glance

By Maj. Gen. James O. Barclay III

As we enter the eighth year of the global war on terrorism, Army Aviation remains the most requested combat asset for ground commanders. From my vantage point, it's clear we will continue to be in high demand into the foreseeable future. That's why the U.S. Army Aviation Center of Excellence (USAACE) team is currently reviewing every aspect of Army Aviation to ensure that we are properly staffed, trained and equipped to exceed every future requirement. At this point, nothing is above scrutiny. We simply cannot afford to retain legacy systems, procedures and structures merely because they have existed for decades and are familiar.



Sky Warrior

From a broad perspective, we are charged with two overarching missions: continued support for the Army force generation (ARFORGEN) effort and shaping and posturing the Aviation branch for the future. Today's demands—on personnel, equipment and systems—will only become more complex.

Meeting Resource Challenges

Synchronizing our efforts across our force, regardless of command or location, is imperative: We must succeed as we continue to face competing resource challenges while working to support the ARFORGEN initiative. While our existing equipment and infrastructure are sustaining the current training mission, increased requirements stemming from transformation and modernization, Army growth, and integration of lessons learned will stress assets and resources beyond their current capabilities. USAACE leadership is working with Aviation enterprise partners (Aviation and Missile Command, Forces Command, U.S. Army Pacific, Eighth U.S. Army, U.S. Army Europe and the Department of the Army) to identify and acquire the additional manpower, equipment, infrastructure and funding necessary to meet projected training and operational growth. From the acquisition of additional aircraft for the training fleet at Fort Rucker, Ala., to the hiring of additional Department of the Army civilian instructor pilots, mobile training teams and mobile assistance teams, Army resources in today's operational environment do not allow for excess or spare assets and capabilities. Army Aviation must rally the key resources needed to support our ground commanders without interruption or degradation to our mission capability.

Training and Operations Initiatives

We cannot rely on acquisition and procurement of additional resources to solve all of our challenges; there are far too many demands, and we face lasting constraints and limitations. USAACE, and aviation formations Army wide, must reevaluate how we are employing existing assets to ensure we are getting maximum effectiveness and utilization from what we already own. Toward this objective, USAACE will take an Aviation enterprise approach to such activities as aviation standardization and training. Leveraging the capabilities and expertise of training and standardization assets external to USAACE and Fort Rucker shows a great deal of promise for expansion of mobile training, new equipment fielding and operational assistance teams. Taking full advantage of those resources keeps us flexible in our ability to train more soldiers without sacrificing training standards. Another effort is the expansion of roles and missions of the Eastern, Western, Fixed Wing and High-Altitude Army National Guard aviation training sites. Each of these organizations brings an increased aviation capability to the ARFORGEN model that

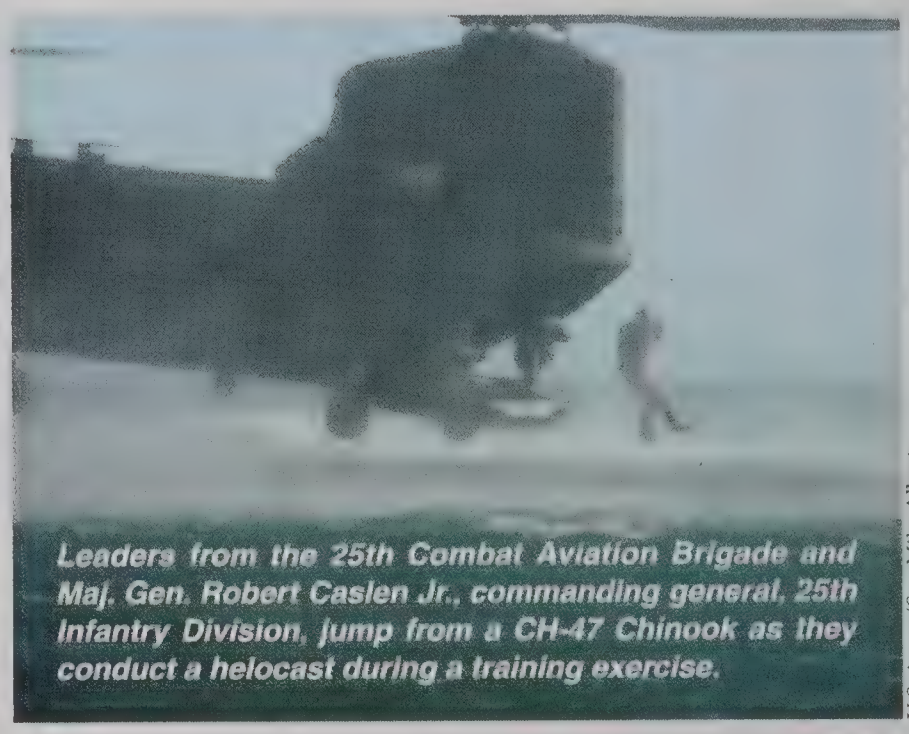


U.S. Army/SSgt. Robert Strain

First Sgt. David Falk, 227th Aviation Regiment, guides soldiers from the 180th Transportation Battalion, 15th Sustainment Brigade, 13th Sustainment Command (Expeditionary), away from a medical evacuation helicopter.

we must capitalize on at every opportunity. If we are to approach full integration and interoperability, we have to continue to incorporate these organizations into the Aviation enterprise for both active and reserve contingents. We are one team unified in one fight with one future.

The quality training our Aviation soldiers receive during initial entry training and graduate-level courses is kept current through the Lessons Learned Integration (L2I) program, which fuses experiences and best practices of our deployed formations with current doctrine and the emerging technology, acquisitions and analysis of the branch. This is the means by which aviation formations and training and development forces manage and integrate vital information into current and future operations, system and aircraft development, and the classroom. Future training enhancements are not only tied to the L2I program, but to fielding of new, complex airframes and systems. Toward this objective, USAACE has stood up the Aviation Warfighter's Forum at https://www.us.army.mil/suite/grouppage/87020.



U.S. Army/Sgt. Mike Alberts

Leaders from the 25th Combat Aviation Brigade and Maj. Gen. Robert Caslen Jr., commanding general, 25th Infantry Division, jump from a CH-47 Chinook as they conduct a helocast during a training exercise.

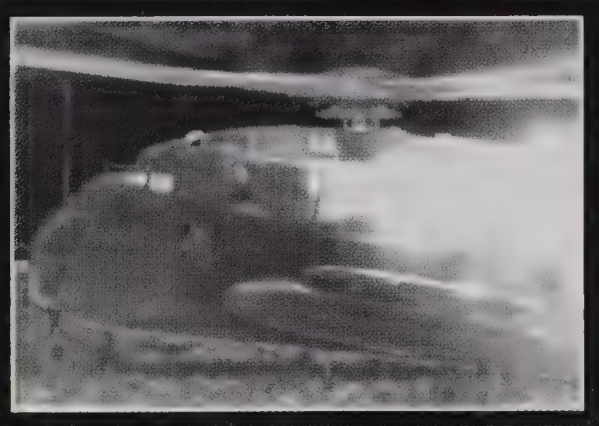
MAJ. GEN. JAMES O. BARCLAY III is the Army Aviation branch chief and the commanding general of the U.S. Army Aviation Center of Excellence and Fort Rucker, Ala. He has served in various aviation and infantry units and has commanded at the company, battalion and brigade levels, with service in Operations Provide Comfort in Iraq, Uphold Democracy in Haiti and Iraqi Freedom. His most recent assignment was as the director of the Joint Center for Operational Analysis (JCOA), U.S. Joint Forces Command, and as the deputy commanding general (maneuver) for the 1st Infantry Division.

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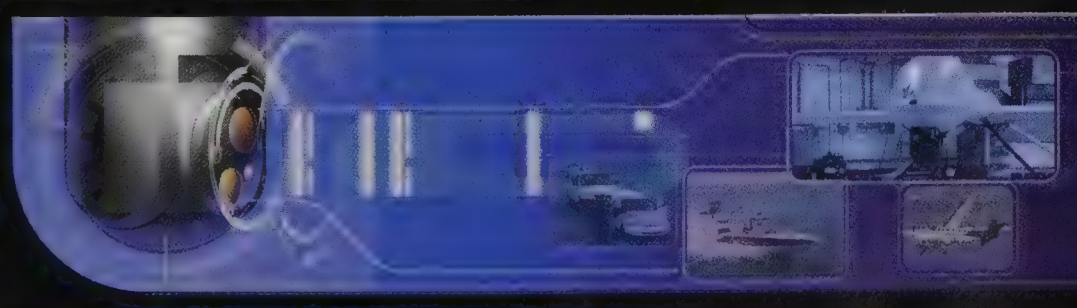
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Sky Warrior-Block O unmanned aircraft system

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The Future of the Branch

This past year has been both challenging and successful for Army Aviation. The transformation and resetting of our aviation formations were two significant milestones—but they are only milestones, not end states. We continue to work hard to support the reset of our formations while fielding the Sky Warrior-A unmanned aircraft systems (UAS), AH-64D modernized target acquisition designation system (MTADS), the UH-60M and the CH-47F. Our operating tempo demands that we improve our ability to conduct training in a manner that minimizes time away from family and organizations.

As the Army redirects its efforts toward resourcing the next armed reconnaissance helicopter, the Kiowa Warrior (OH-58D) will continue to provide combatant commanders with outstanding armed aerial reconnaissance capabilities. USAACE and the Army are taking action to ensure the OH-58D remains ready, relevant and capable. Upgrades to this airframe ensure that we meet reconnaissance aircraft requirements effectively until the next armed reconnaissance platform is in operation. Safety enhancements, replacement of obsolescence and improved capabilities are expected to extend the entire fleet as well as aircraft survivability and reliability. We owe it to our aviators, and the warfighters they support, to provide the best equipment available.

Predictive planning is another area in which I have focused USAACE. Given myriad ongoing efforts across the aviation community, it is critical that we maintain a long-range planning window that will allow us to better position ourselves for upcoming efforts in a coordinated manner. In presenting Army Aviation as an integral part of the future modular force, we must have a clear vision of our objectives, roles and responsibilities in order to effectively compete for and receive the necessary resources to take the branch into the next 25 years. Our success demands reevaluating our training institution and properly introducing new technology to the field where and when required. The evolution of training is tied to implementing new strategies and processes, supporting infrastructure adjustments, wisely and effectively introducing integrated technology and systems, and appropriately investing in the training and development of our leaders and soldiers.

Future Combat Systems such as Sky Warrior UAS, joint cargo aircraft (JCA), the armed reconnaissance helicopter (ARH) and the AH-64D Block III are on the horizon and will enhance our joint force effectiveness. The continually emerging capabilities of UAS provide a significant capability to commanders at all levels to obtain and maintain accurate situational awareness, rapidly gain situational understanding and bring to bear the right application of forces at the right time to win the fight. The integration of the JCA will significantly improve the flexibility and responsiveness with which Army Aviation will be able to provide support to the ground force commander. On program and on budget, the AH-64D Block III will significantly improve the effectiveness and lethality of our attack aviation formations.

One of our soldier initiatives for UAS operators is the creation of new 15W/E military occupational specialties (MOS). Establishing these MOSs ensures that our new UAS formations will be properly staffed with skilled soldiers to accomplish the mission while ensuring those soldiers have clear and sustainable career paths. In addition, we are taking a hard look at our professional development curricula for all ranks and occupations to ensure we are addressing the right subjects and developing effective leaders and operators.

USAACE possesses the talent and expertise to accomplish our objectives for fiscal year 2009 and to begin the next 25 years as a relevant branch that continues to significantly influence our nation's ability to fight and win wars. I am continually impressed and humbled by the quality of soldiers, noncommissioned officers and officers within the Aviation branch and the amazing work they complete around the world every day. Preserving this legacy—maintaining the high standards of training, equipment sustainment and operational support that Army Aviation has achieved in recent years—is essential. ★

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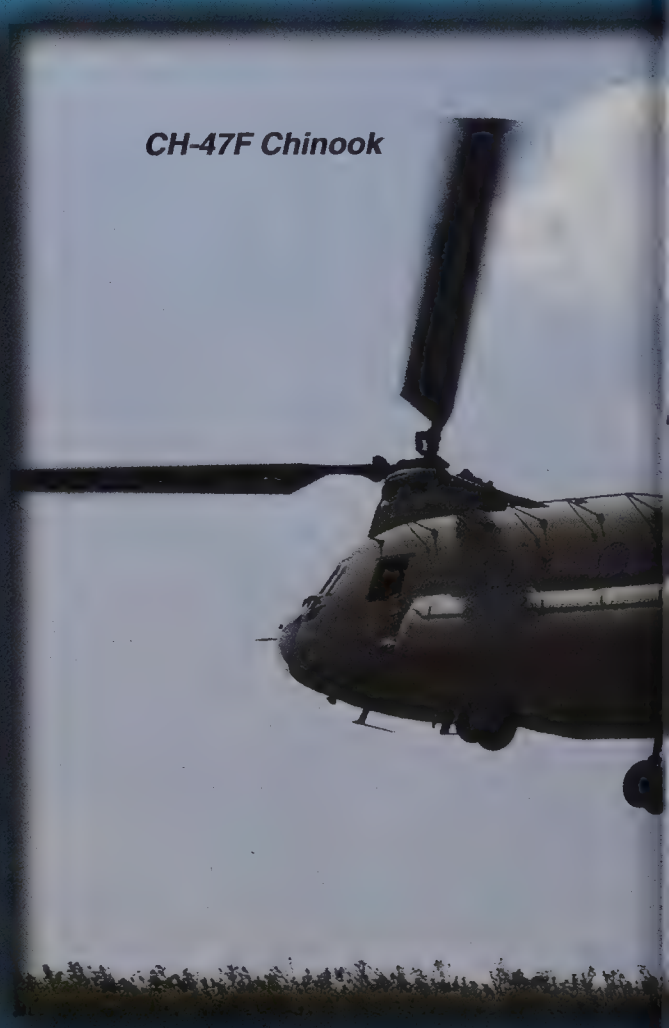


Army Aviation:

Balancing the Equipment To Support Warfighters



AH-64D Longbow Apache



CH-47F Chinook



Black Hawk

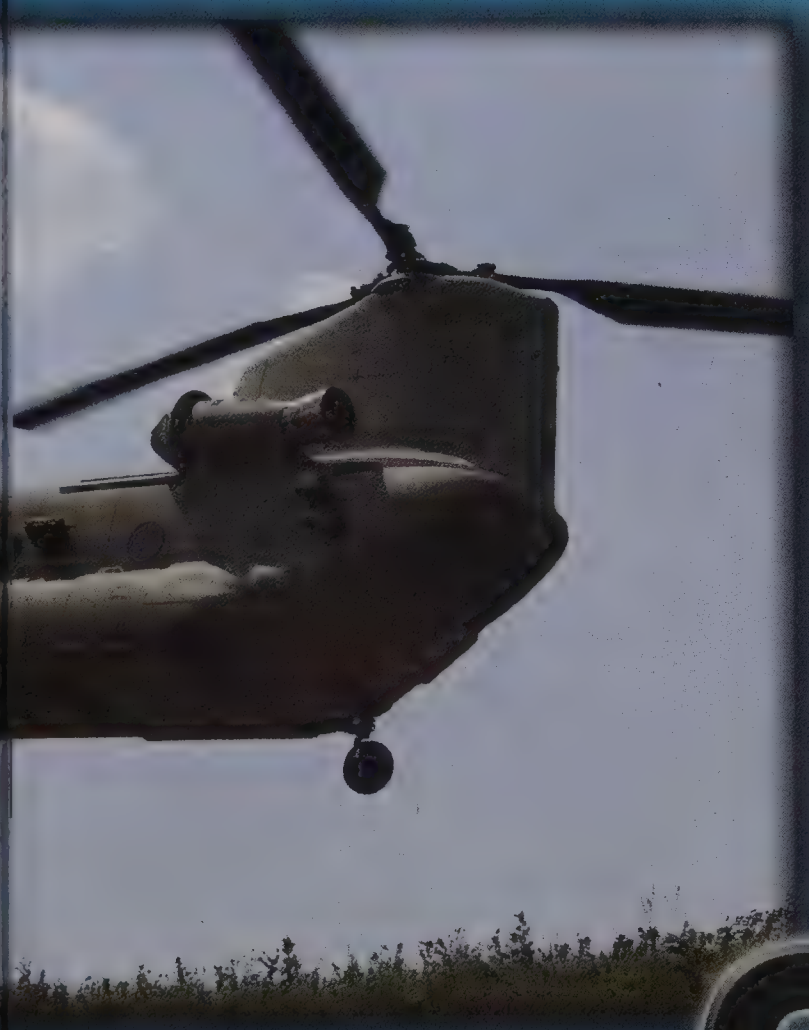


Raven UAV

All photos (except Apache) are courtesy of U.S. Army.

Challenges Today and Tomorrow

By Scott R. Gourley







pening an Army Aviation Modernization panel briefing at the 2008 AUSA Annual Meeting in October, Brig. Gen. James O. Barclay III, Army Aviation branch chief and commanding general of the U.S. Army Aviation Warfighting Center and Fort Rucker, Ala., observed that the Aviation branch is balancing its responsibilities of continuing to support the ongoing wars in Afghanistan and Iraq while meeting continuous demands to stay at high performance levels in terms of personnel, equipment, systems and training base.

"These tasks are all challenging, but we see them as achievable," Gen. Barclay said. "We are



AH-64D Apache

also endeavoring to shape and posture the Aviation branch for the future, both in the near term and far term."

Examples of Aviation's equipment balancing act between immediate, near- and far-term warfighter support can be found in a representative sampling of airframe activities.

Apache

One iconic example of the balancing act under way within the Army Aviation branch is the AH-64 Apache: Ongoing war needs are being met by a combination of new and remanufactured Block II AH-64D Apache Longbows rolling out of the Boeing plant in Mesa, Ariz. Immediate/near-term needs are being addressed by the recent arrival of the first VUIT-2 equipped Block II Apache battalion in theater; far-term needs are being met by continuing flights of the next-generation Block III aircraft.

Black Hawk

In terms of immediate needs, in 2007 the Pentagon and U.S. Army approved the full-rate production of UH-60M baseline aircraft. In addition, approval was given for long-lead procurement actions for low-rate initial production quantity of UH-60M upgrade aircraft.

Technologies included in the UH-60M upgrade are: fly-by-wire flight control system that incorporates "active stick" technology and dual channel-triple redundant flight control computers; glass cockpit which incorporates the common avionics architecture system (CAAS); and fully authorized digital engine control.

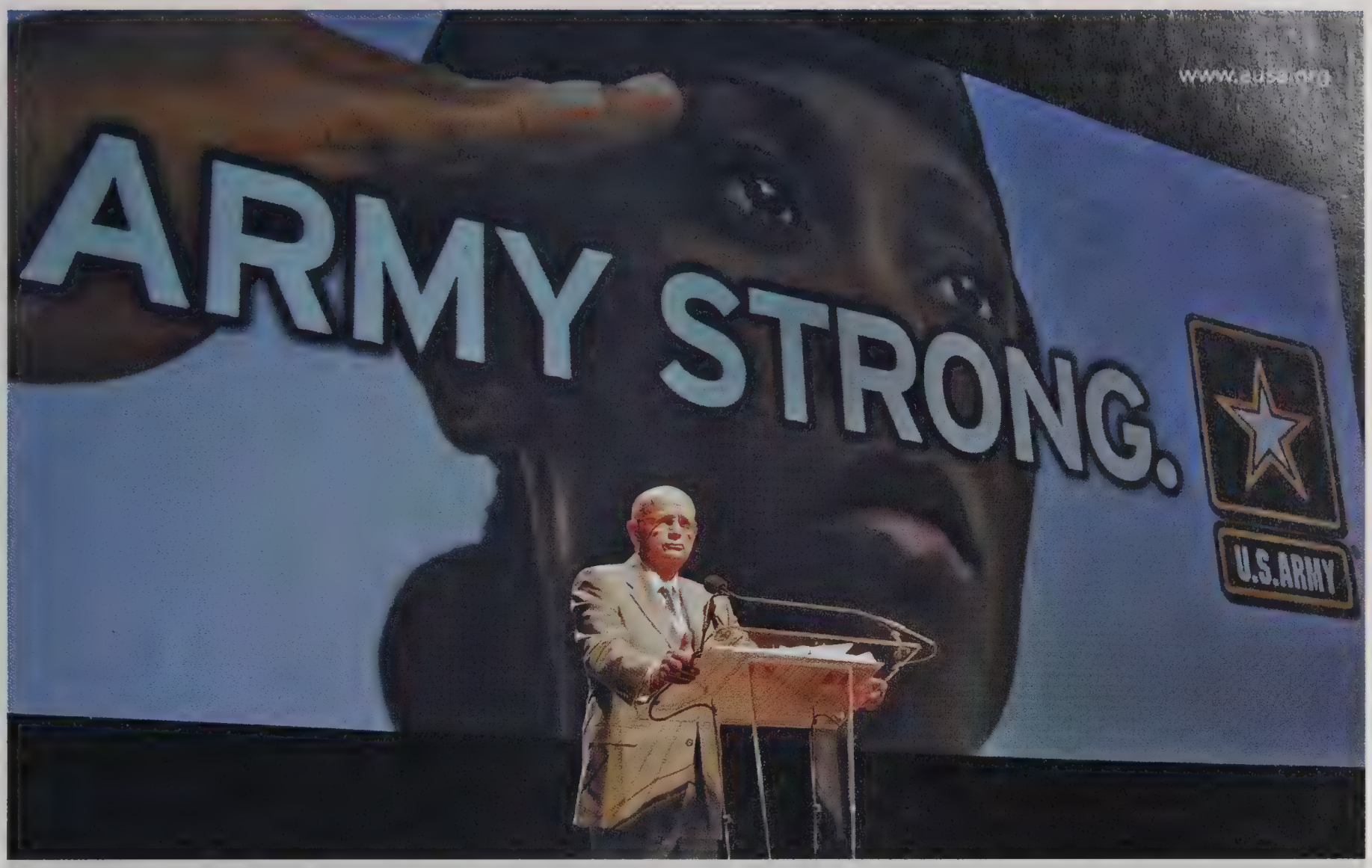
According to representatives of manufacturer Sikorsky Aircraft, the M model is the culmination of "more than 30 years of technological advancement, improved performance and real-world experience." In June 2008, the 4th Battalion, 101st Aviation Regiment, became the first unit equipped with the UH-60M baseline model of the aircraft.

The Army moved a step closer to meeting tomorrow's warfighter needs last August, when Sikorsky conducted the first flight of a UH-60M upgrade Black Hawk at its West Palm Beach, Fla., facility. In recognizing the flight milestone, Col. L. Neil Thurgood, Utility Helicopter project manager for the U.S. PEO Aviation office, noted: "Today's first flight of the UH-60M upgrade aircraft with fly-by-wire technology represents the next step in providing the U.S. military the best capability to execute its mission. This aircraft contains dramatic technological advances, yet retains and improves on the proven design of the world's most capable utility helicopter."



Black Hawk

SCOTT R. GOURLEY, a freelance writer, is a contributing editor to ARMY Magazine.



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Chinooks arrive in Afghanistan's Bamyan Province to pick up soldiers of the 101st Division Special Troops Battalion, 101st Airborne. The helicopters shuttled more than 100 troops to search for bomb-making materials and facilities.

"The U.S. Army Utility Helicopters Project Office and Sikorsky Aircraft remain committed to the right technologies, equipment and support infrastructure to empower our most important customer, the soldier," Col. Thurgood added. "The UH-60M upgrade demonstrates the balance Sikorsky and the U.S. Army have applied to address both current and future needs. Today's achievement is the result of dedicated effort and hard work by the entire upgrade program team."

The first delivery—out of a projected total quantity of approximately 900 UH-60M upgrade aircraft—is scheduled for the fourth quarter of 2010.

Pathfinder Completes First Flight

The Pathfinder advanced pilotage system successfully completed its first flight on an HH-60L Black Hawk medevac helicopter at Felker Army Airfield, Fort Eustis, Va., in November. Derived from the AH-64D Apache helicopter's modernized pilot night-vision sensor, Pathfinder improves flight safety through state-of-the-art technology.

"We have demonstrated Pathfinder's pilotage capability as a fully integrated sensor system for the Army's cargo and utility helicopter community," said Monty Watson, Pathfinder program manager at Lockheed Martin Missiles and Fire Control, in a news release. "It will be a great asset for warfighters."

The only forward-looking infrared system specifically intended to support terrain flight during reduced visibility conditions, Pathfinder significantly increases situational awareness and reduces pilot workload through a head-up, eyes-out, helmet-mounted display. Pathfinder's high-definition resolution is designed to give pilots undertaking complex missions the ability to fly at safer altitudes and airspeeds and avoid obstacles such as wires, poles and trees.

After completing its first flight, the system entered the developmental test phase. U.S. Army Aviation Applied Technology Directorate pilots and engineers are now determining the level of readiness Pathfinder demonstrates for application to cargo and utility aircraft. Following developmental testing, Army air crews will conduct a limited user test to evaluate Pathfinder in an operational environment.

Chinook

Army Aviation is also meeting both immediate and near-term warfighter requirements with ongoing activities surrounding the CH-47 Chinook helicopter.

Just three days before the UH-60M upgrade's first flight milestone, Boeing announced receipt of a multiyear U.S. Army contract valued at $4.3 billion for 181 CH-47F Chinooks and 10 additional Chinooks under fiscal year 2008 supplemental funding. The award included options for an additional 24 aircraft during the course of the contract.

The announcement served to highlight the contributions that the CH-47F is making across the full spectrum of operational missions—including air assault, combat resupply, humanitarian relief, search and rescue, and transport.

Built at the Boeing Rotorcraft Sys-



OH-58D Kiowa Warrior

tems facility in Ridley Township, Pa., the CH-47F helicopter delivers greater mission-critical capability for the warfighter with a newly designed, improved airframe, a Rockwell Collins CAAS cockpit and a BAE-designed digital advanced flight control system.

By late August 2008, Boeing Rotorcraft Systems had delivered 48 CH-47F helicopters to the U.S. Army.

Armed Reconnaissance

The Army's aviation balancing act has also been complicated by recent program termination decisions on the ARH-70A armed reconnaissance helicopter (ARH).

The ARH had been intended to replace the Army's fleet of Bell Helicopter-built OH-58D Kiowa Warriors and to fill a void created by the 2004 cancellation of the RAH-66 Comanche program.

According to contract timelines, in June 2008, Bell Helicopter had submitted its proposal for low-rate initial production lot 1 of the ARH-70A. In July 2008, the Army assessed the proposal and then notified Congress that the ARH program had exceeded cost-growth limits of the Nunn-McCurdy Act, which triggered a mandatory DoD review of the program.

Continuous Technology Refreshment

In addition to major upgrade packages, near- and far-term warfighter aviation needs are being addressed in other innovative ways. Early examples can be found in the continuous technology refreshment (CTR) program now being explored for expanded application by a government-and-industry team.

"We have created a model that offers a great opportunity for solving the critical obsolescence and aging weapon-system challenges that have been plaguing us for years," explained Ken Nolan, who leads the CTR effort for Battelle, the Army's industry partner.

As the 21st-century incarnation of the earlier "modernization through spares" concept, the CTR model examines particular components and determines the dollar amounts available for that spare-part component under Army sustainment funding.

According to Nolan, the Battelle CTR model examines the sustainment budget and then works with Aviation and Missile Command and other government partners to develop a form/fit mission function replacement for that part using new technology.

"When it is completed and the government has reviewed and approved it, the item manager can start ordering the newer—and in most cases cheaper—better part rather than continuing to order the older, less reliable part," Nolan said.

Emphasizing that the one-for-one replacement parts are absolutely seamless for the user and the system, he noted that the new technologies offered dramatic reductions in weight, power requirements and heat generation.

Nolan said that the first trial item CTR will tackle is the UH-60 caution advisory panel (CAP), which enables the pilot to continually monitor oil pressure, vibration, electrical signals and approximately 80 other vital flight indicators for out-of-tolerance conditions. The current panel is based on technology that is almost 25 years old, however, requiring five circuit cards and an array of 164 incandescent lights to detect problems and signal an alert. The CTR-designed CAP replacement uses LED technology and relies on a single circuit card with 182 sensor cells grafted onto its reverse side instead of multiple cards and connectors. The number of parts was reduced from 190 for the original equipment to four for the new model.

The first new CAPs were installed in 2005 with subsequent fielding taking place through spares attrition. "We have 600 to 700 CAPs in the air right now," Nolan said. "And we went from $11,000 a copy down to $4,800 a copy."

Following the success of what Nolan termed the "proof-of-principle phase," he said that the Black Hawk program "embraced it and put about nine more parts on the table" for first article production and follow-on approval. In addition, the CTR program concept is being expanded to multiple project offices and multiple airframes.

"We're just getting under contract for the first Kiowa part—the armament electronics unit for the OH-58D," Nolan said.

Last October, the Department of Defense notified Congress and Bell Helicopter that it would not certify the U.S. Army ARH program for continuation. As a result, the Army Acquisition Executive Office for Aviation directed that the program's contract be terminated completely.

Explaining the decision, Secretary of the Army Pete Geren stated: "The cost and schedule that were the focus of the decision to award the contract to Bell Helicopter are no longer valid. We have a duty to the Army and the taxpayer to move ahead with an alternative course of action to meet this critical capability for our soldiers at the best price and as soon as possible."

Secretary Geren's comments reflect the fact that the significance of Army Aviation's balancing act is recognized at the highest levels of military leadership.

Lt. Gen. James D. Thurman, Army director of operations, added: "Warfighting capability for a manned, armed reconnaissance helicopter is crucial to support our ground combat commanders and remains a critical requirement for the Army. Th[is] decision ... does not in any way diminish the imperative for this capability. Our operational tempo, attrition and losses of six aircraft per year underscore the need to fill this requirement as quickly as possible.

"To this end, we will rapidly pursue a revalidation of the particular characteristics needed for this capability so that we can restart the process of acquiring a manned, armed reconnaissance helicopter," he said. "Concurrently, we will invest significant efforts into our existing Kiowa Warrior fleet that ensures that our aircrews and commanders continue to have the best capability possible to perform the mission."



Raven UAV

Raven

In addition to the balancing act that is being performed across the entire manned helicopter fleet, Army Aviation planners are balancing current and future warfighter support across the fleet of unmanned aircraft systems (UAS).

One example is the RQ-11B Raven small UAS (SUAS). Manufactured by AeroVironment of Simi Valley, Calif., the rucksack-portable Raven is used for reconnaissance, surveillance, target acquisition, force protection and battle damage assessment. Originally emerging under the Natick Soldier Research, Development and Engineering Center's (NSRDEC) Pathfinder advanced concept technology demonstration, the system has a 10-kilometer range and 90-minute endurance.

Program observers note that SUAS, like Raven and others, have proliferated on today's battlefields as warfighters have begun to realize the myriad benefits of their inherent intelligence, surveillance and reconnaissance capabilities, down to the squad and team levels.

One of the Raven's tactical shortcomings, however, has been its reliance on an analog downlink to provide video and telemetry generated by the SUAS sensor package. The analog system presents challenges in the transmission of critical full-motion video during weak signal periods and might contribute to lost link and fly-away problems. Moreover, the analog video requires significantly greater bandwidth than do digital technologies.

As a result, during the past two years NSRDEC representatives, together with industry partner AeroVironment, worked to develop a new digital data link (DDL) for Raven. Their efforts came to fruition in mid-October 2008 when the government announced a new acquisition requirement for "60 additional RQ-11B SUAS systems and initial spares packages configured with DDL and [the] retrofit [of] 240 existing analog Raven systems with DDL to support global war on terrorism operations."

The announcement states that "implementation of a DDL will allow the operation of 16 Ravens in the same radio frequency spectrum, vice four that are possible with an analog link. By making a denser operating environment possible, DDL mitigates frequency restrictions in theater which limit both training and operational effectiveness. DDL capability will also reduce fly-aways due to frequency interference."

It is expected that the Army will field several of the DDL-equipped Ravens to a brigade combat team in theater for rapid military utility assessment of the system's new tactical capabilities. Based on that assessment, it is expected that near- and far-term warfighter requirements will be addressed through the subsequent retrofit of the entire Raven fleet with DDL capabilities.

The Goal: Equipment Balance

These airframe programs are representative of the equipment balance that Army Aviation is achieving against immediate, near- and far-term warfighting requirements. The equipment balance is just one of the many broad areas—like personnel and training base—in which the branch is working to support the warfighters of today and tomorrow. ★

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Joint Unmanned Aircraft Systems Center of Excellence:

Saving More Lives

By Scott R. Gourley

Shortly after the December 7, 1941, attack on Pearl Harbor, the U.S. Army began building a training camp near the community of Indian Springs, Nev., about 45 miles north of Las Vegas. By the end of February 1943, the camp was being used as a divert field and base for air-to-air gunnery training. Following several decades of transitional changes, in 2005, Indian Springs Air Force Auxiliary Field officially changed its name to Creech Air Force Base (AFB). The designation honors Gen. Wilbur L. (Bill) Creech, U.S. Air Force, commander of Tactical Air Command from 1978 to 1984.

Today Creech AFB serves as home to Air Force units, including the 432nd Wing "Hunters" and their MQ-1 Predator and MQ-9 Reaper unmanned aircraft systems (UAS). In addition, Creech is also home to the Joint Unmanned Aircraft Systems Center of Excellence (JUAS COE).



The 432nd Aircraft Maintenance Squadron spearheads the first ever blue-suit launch of the MQ-9 Reaper aircraft from Creech Air Force Base, Nev.

U.S. Air Force/Lawrence Crespo



U.S. Air Force/MSgt. Robert W. Valenca

An MQ-1 Predator unmanned aerial vehicle makes a low approach while another waits for takeoff clearance at Creech Air Force Base. The 11th Reconnaissance Squadron at Creech AFB prepares pilots, sensor operators and other specialists for worldwide intelligence, surveillance and reconnaissance missions. The Predator can carry two Hellfire air-to-surface missiles in addition to various cameras and synthetic-aperture radar.

"The COE was born as a result of discussions between the services and the Joint Staff on executive agencies for unmanned aircraft systems," explains Lt. Col. Ron Misak, U.S. Army, part of the center's Command Operations Group. "The compromise that they arrived at was the establishment of a Joint Unmanned Aircraft Systems Center of Excellence."

"One of the important milestones for our evolution in our brief history was the realignment under U.S. Joint Forces Command (USJFCOM) in 2007," said Lt. Col. Jeff White, U.S. Army, a member of the COE command staff. "Prior to that realignment, the JUAS COE was assigned to the Joint Staff J-8. But the realignment allowed us to leverage a combatant command and all of the diverse subelements, directorates and subordinate commands within USJFCOM to increase our foothold in the UAS discussions."

As approved in USJFCOM Directive 5170.3, the center's official charter reads: "Joint Unmanned Aircraft Systems Center of Excellence (JUAS COE) provides support to the joint operator and services by facilitating the development and integration of common unmanned aircraft system operating standards, capabilities, concepts, technologies, doctrine, tactics, techniques, procedures and training. JUAS COE leverages existing combatant command and service initiatives and activities to provide joint integrated solutions and improved interoperability."

The COE's critical work began long before its realignment under USJFCOM. Initial activities during 2005 and 2006 led to the first joint UAS concept of operations (CONOPS), Edition 1. Briefed to the Joint Requirements Oversight Council (JROC) in February 2007, the concept received its JROC approval memo a month later.

"Establishment of the COE included a list of taskings," Col. Misak observed. "The first one was, primarily, we would like you to look at CONOPS on how to deploy these things. So that was probably the 'capstone' project to get things started."

In addition to looking at the military aspects of UAS concept of operations, the Vice Chairman of the Joint Chiefs of Staff tasked COE with studying the requirements associated with operating the systems in the National Airspace System (NAS).

"We had no idea what the requirements were, so we undertook a study and picked the target year 2013 to see what the training requirements alone would be for the UAS operating in the NAS. The number we came up with from the services was about 1.1 million flight hours a year using the NAS," Col. Misak said.

According to Capt. Steve Baxter, U.S. Navy, a member of the JUAS COE senior staff, "not much had happened" in exploring these issues between 2002 and 2005.

"I was amazed to see that the topic was still on the table in 2005," he said. "What this organization has done is really one of the most significant movements forward to get UAS into the National Airspace—not *all* NAS but the areas we need to be in to affect training."

For example, early UAS training flights took place at locations like Nellis Air Force Base, Nev., or the ranges at Fort Huachuca, Ariz.

"Now almost every Infantry battalion has a Raven system that they have to fly somewhere," Capt. Baxter said. "Every Infantry BCT has a Shadow platoon that has to fly somewhere. We are expanding beyond the active duty bases to guys in National Guard armories around the country who will be looking for training areas and wanting to put these things up into the National Airspace. Even Predators are shifting to the National Guard in places like California, Texas, Nevada and North Dakota, with New York to follow. They are either already flying or are getting ready to fly either Predator or Reaper."

Working out the myriad technicalities surrounding UAS/NAS issues has mandated close cooperation between all services and the U.S. Federal Aviation Administration. Capt. Baxter noted that the challenges extend well beyond those of NAS and the continental United States.

"You also get into international airspace requirements," he said. "For example, when you have a brigade stationed in Germany, how do you put a Shadow up into international airspace?"

Part of the underlying challenge that the JUAS COE examination process is addressing involves the identification of common core skills that every UAS operator should possess in order to carry out NAS operations.

"I guess our bumper sticker, if we had one, would be 'Operational employment and training is how we affect

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SCOTT R. GOURLEY, a freelance writer, is a contributing editor to ARMY Magazine.

UAS,'" Col. Misak said. "Particularly tied to the airspace is the requirement to look at training requirements at a joint operational level for unmanned aircraft in the NAS. Some of these systems have been pulled out of ACTDs [advanced concept technology development programs] early and deployed without going through the traditional acquisition system—the whole DOTMLPF [doctrine, organization, training, materiel, leadership and education, personnel and facilities] development. So part of our JROC tasking is to look at training requirements to get these aircraft into the NAS."

Coinciding with this process, the COE is working to standardize UAS identifiers across the services. Instead of classes of UAS, as in the U.S. Army Future Combat Systems (FCS), or tiers of UAS, as in the U.S. Marine Corps, the JUAS COE has developed five group designations that will place UAS discussions into a commonly understood framework.

Noting that "an Army warrant officer working with us here came up with the initial concept," Capt. Baxter explained, "we base the groups on static qualities of the vehicles, including weight, typical operating altitude and typical operating speed—things that won't change as technology changes."

"If nothing else, it goes a long way toward allowing all of the services, as well as all of the government and civilian agencies, to have a common language, so that when we say Group 4, everybody at the table will have a mental picture of what a Group 4 UAS is," he said.

The new groups were contained in the JUAS COE concept of operations Edition 2, which went to the Joint Requirements Oversight Council in October. (Approval was pending when ARMY went to press.)

In addition to affecting training and presenting the new group designations, CONOPS is represented by COE planners as more of an operational document for users and staffs at the operational/joint task force level in the employment of UAS, according to Col. Misak.

"It doesn't present *the* way, but rather *a* way of employing UAS. It goes through different scenarios and different types of activities, including Department of Homeland Security support, ways that you can employ them and considerations for employment," Col. Misak said.

Essential to the development of the CONOPS was studying how the UAS are actually being used in theater.

"Through the process of answering [the JROC approval memo], we have been able to highlight these vehicles that are doing things that nobody thought about five years ago," Capt. Baxter said. "Maybe they thought about them in isolation but not in one 18-hour mission."

He added: "The good news is that the doctrine and procedures initially written for MCO [major combat operation] were flexible enough to be adapted to defeat the enemy in a counterinsurgency environment. The doctrine was flexible enough and the people adaptive enough to make it a success story."

Acknowledging that CONOPS "can mean different things to different people," Capt. Baxter continued: "We've had discussions with other folks outside of the command, and even here inside the command, about 'What's the requirement for a UAS concept of operations?' After all, there isn't a 'fighter CONOPS' or a 'bomber CONOPS.' But this is a document that is directed toward the joint task force planner/operational level planner to allow that person to become exposed to, perhaps for the first time, UAS possibilities that he might not have thought about before."

Although the CONOPS is not materially focused, COE representatives noted that they "do keep track of new materiel capabilities" in areas like payloads so that they may be included in CONOPS.

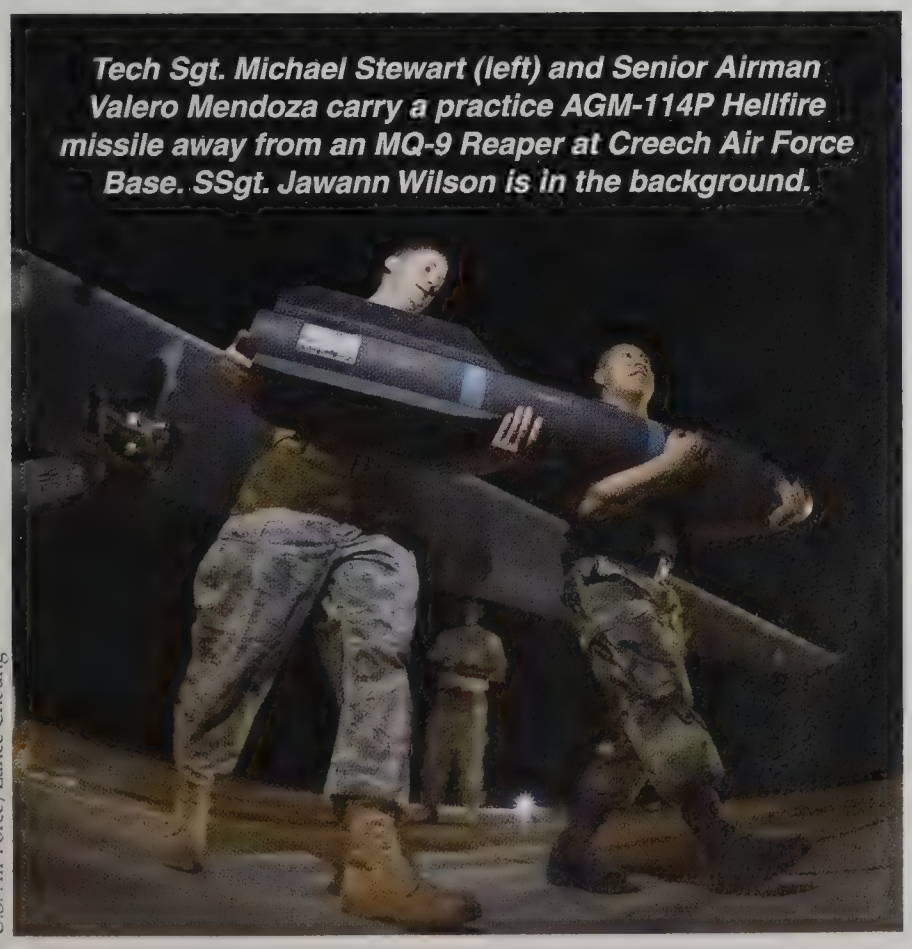
"We keep abreast of current capabilities and emerging capabilities to integrate them into the CONOPS," noted Col. White. "But our role would be something along the lines of, 'Given this capability—whatever that capability is—how might it best be employed?'"

Upcoming COE activities will likely range from "best of breed" studies on uses for UAS full-motion video and training to a look at contested airspace and counter-UAS operations.

In terms of messages for today's warfighters, Col. Misak observed: "Overall, unmanned aircraft systems save lives. Because they are unmanned, they can do the dangerous jobs so we don't have to put people at risk. We're working to make the processes work even better to save more lives."

"Our mission is to provide UAS support to our customers—the services, combatant commands and, ultimately, the joint warfighters," added Col. White. "And that support comes in delivering tangible products that can help increase the effectiveness of these systems and soldiers' understanding of the complicated issues surrounding them." ★

Tech Sgt. Michael Stewart (left) and Senior Airman Valero Mendoza carry a practice AGM-114P Hellfire missile away from an MQ-9 Reaper at Creech Air Force Base. SSgt. Jawann Wilson is in the background.



U.S. Air Force/Lance Cheung

West Point Launches Oral History Center

By Dennis Steele
Senior Staff Writer

The U.S. Military Academy at West Point, N.Y., has launched an ambitious project to document military history from the soldier's viewpoint, planning and developing an online resource for students, soldiers, historians, journalists and the public that will eventually offer first-person accounts of war from thousands of soldiers.

The West Point Center for Oral History will begin operating a web site this month with the objective of assembling an unrivaled video, audio and text record of military life. Its address is www.westpointcoh.org. The center's core mission is to capture the personal narratives of those who have "been there and done it." As the home page states: "Every soldier has a story. Here is where the story is told."


Dennis Steele

Plans for the collection also include interviews with senior Pentagon strategists, former Secretaries of Defense and State and elected leaders who have helped shape military and foreign policy. Along with contemporary presentations, plans include reaching back to the wars of the past through retrospectives on World War I, the Civil War and other major American conflicts with presentations by visiting historians and West Point faculty members.

The center's initial offerings will be interviews with members of the Academy's class of 1967, who were sent almost immediately into combat in Vietnam, and interviews with soldiers who have served in Iraq and Afghanistan, which will be added continually to present a comprehensive anecdotal account of the current campaigns. Researchers also are gathering material from other Vietnam veterans and World War II and Korean War veterans. The center will be a perpetual work in progress, continuously updated and expanded.

The Center for Oral History is one of several "centers of excellence" at West Point that have been established to add to the academic opportunities of cadets without adding to the curricular budget. All West Point centers of excellence are independently funded entities, which are made possible by the generosity of donors recruited by the West Point Association of Graduates.

The Center for Oral History will be housed under the Academy's Department of History. The other centers of excellence are the Combating Terrorism Center, housed under the Department of Social Sciences, and the Center for the Law of Land Warfare, housed under the Department of Law.

The Center for Oral History has the backing of a celebrated and experienced board of advisers that includes documentary filmmaker Ken Burns; Lt. Gen. Brent Scowcroft, U.S. Army retired, who served as the National Security Adviser to Presidents Gerald Ford and George H.W. Bush and military assistant to President Richard M. Nixon; Pulitzer Prize-winning journalist and author Rick Atkinson; author and ABC News chief White House correspondent Martha Raddatz; author Lt. Col. James Carafano, U.S. Army retired, currently on the staff of the Heritage Foundation; and distinguished military historians and academicians from a range of disciplines.

Gen. David H. Petraeus, a 1974 graduate of the Academy, said: "Our Army has a proud history, one that is chronicled in innumerable books and films. This center aims to record our Army's history in a different way, through the personal oral histories of our soldiers captured by thorough, thoughtful interviews. It's exciting to think what will be preserved for posterity by this endeavor."

The Center for Oral History is designed to be a powerful learning tool for West Point cadets and other scholars, an important research center for historians and a destination for the public to gain greater understanding of the essential and unique calling of the U.S. soldier. ★

Army Poised For EW Resurgence

By Scott R. Gourley

In response to the realities of the electromagnetic spectrum and its impact on the modern battlespace, the U.S. Army has begun a resurgence of its electronic warfare (EW) organizations and capabilities. Early evidence of this resurgence, which began to surface in the first quarter of fiscal year (FY) 2009—and is still emerging—includes the release of a new EW field manual, the formal establishment of a new EW functional area and initial personnel assignments to that area.

EW is one of the five core capabilities of information operations, together with computer network operations, psychological operations, military deception and operations security.

As noted in Joint Publication 3-13.1 *Electronic Warfare:* "Military operations are executed in an information environment increasingly complicated by the electromagnetic spectrum (EMS). The EMS portion of the information environment is referred to as the electromagnetic environment (EME). … The recognized need for military forces to have unimpeded access to and use of the EME creates vulnerabilities and opportunities for electronic warfare in support of military operations."

While the U.S. Army can rightfully claim a strong historical background in EW, some of its early capabilities in that arena disappeared following the Vietnam War. While combined Army and Joint service capabilities were able to satisfy many EW requirements during the next quarter cen-



JIEDDO

Insurgents use cell phones to detonate radio-controlled improvised explosive devices (IEDs); jamming systems prevents IEDs from exploding.

tury, the growing presence of improvised explosive devices (IED) in late 2003 served to spotlight Army challenges.

The Army IED Task Force, formed in October 2003, together with the emergence of the Joint Improvised Explosive Device Defeat Organization (JIEDDO), led to the presence of a diverse array of IED jammers in theater by the middle of 2005. Yet by the beginning of 2006 there was still concern over the lack of electronic warfare operators (EWO) to oversee these systems. In fact, in many instances, the U.S. Navy and U.S. Air Force have been providing the missing EWOs to support Army operations.

Following a directive by former Army Vice Chief of Staff Gen. Richard A. Cody, the Army launched two short service training courses: a tactical electronic warfare operations course at Fort Huachuca, Ariz., designed for battalion level and below; and an operational electronic warfare planner's course at Fort Sill, Okla., for brigade level and higher. (Along with mobile training team (MTT) training, more than 1,500 personnel have been trained in these courses since the fall of 2006.) Moreover, the establishment of the new classes was accompanied by continuing EW activities by MTTs, doctrinal development and personnel planners.

In the case of mobile training teams, for example, recent figures indicate that more than 53,000 soldiers have now received training in EW/CREW (counter-radio controlled explosive device electronic warfare). Examples of these CREW systems have included programs like the shortstop electronic protection system, Warlock Green, Warlock Red, Warlock Brown and others.

MTT training has also been provided as part of nearly two-dozen maneuver readiness exercises conducted by units prior to theater deployment. During the exercises, MTT members have served as EWOs for those deploying units, providing an introduction to the EW capabilities available in theater from the other services and, soon, by U.S. Army personnel.

Army EW doctrinal development has also made significant strides over the past two years. A solid foundation for this doctrinal advancement was established by the late January 2007 release of the updated Joint Publication (JP) 3-13.1 *Electronic Warfare.* Among other things, the newly revised joint publication provides a common groundwork of terminology, specifically breaking EW into the subordinate focus areas of electronic attack (EA), electronic protection (EP) and electronic warfare support (ES).



U.S. Army/2nd Lt. Nathaniel Beckett

CW2 Gilbert Sanchez, 2nd Brigade Combat Team, 101st Airborne Division (Air Assault), checks to ensure a vehicle's electronic countermeasures are operating properly before a mission in Baghdad, Iraq.

According to JP 3-13.1: "EA involves the use of EM [electromagnetic] energy, directed energy, or antiradiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability and is considered a form of fires. EP involves actions taken to protect personnel, facilities, and equipment from any effects of friendly or enemy use of the electromagnetic spectrum that degrade, neutralize, or destroy friendly combat capability. ES is the subdivision of EW involving actions tasked by, or under direct control of, an operational commander to search for, intercept, identify, and locate or localize sources of intentional and unintentional radiated EM energy for the purpose of immediate threat recognition, targeting, planning, and conduct of future operations."

The Army retained the same definitions in its own doctrinal development, assigning responsibility for individual subdivisions to multiple schools—for example, as a form of fires, EA falls under the Fires Center of Excellence at Fort Sill—while placing advocacy for the overarching EW

SCOTT R. GOURLEY, a freelance writer, is a contributing editor to ARMY Magazine.



U.S. Army/2nd Lt. Nathaniel Beckett

Mr. Sanchez researches electronic threats at Camp Liberty, Iraq.

arena together with computer network operations at the U.S. Army Combined Arms Center (CAC) at Fort Leavenworth, Kan.

As part of a service overview of ongoing EW requirements activities presented to a recent industry gathering, Lt. Col. Fred Harper, deputy director for the U.S. Army Computer Network Operations and Electronic Warfare Proponent (USACEWP), offered an update on the evolution of the EW concept and related EW activities within the U.S. Army Training and Doctrine (TRADOC) community.

Acknowledging that the Army "didn't have an [EW] concept out there for quite some time," Col. Harper noted, "we really didn't start developing it until 2006, and then we got it approved in 2007."

"What that concept really does for us is to integrate this capability for EW," he said. "What we've done is place it inside of an organization called an ICDT—an integrated capabilities development team—made up of all of the Centers of Excellence within CAC. Then we get together with those centers to get certain things across and to get them approved. One of those was the [EW] concept, which was approved through TRADOC all the way up through Department of the Army.

"We haven't had [EW] doctrine in over a decade," Col. Harper continued. "The intel community had some ES, EP and EA doctrine, but it didn't encompass what we're trying to do within the Army. So we developed FM 3-36, which will 'hit the streets' within the first quarter of FY 2009, and that really gets after how we integrate and employ that EW capability within the Army."

In terms of organizational milestones, 1,511 is the so-called magic number of new enlisted, warrant and commissioned Army EW personnel positions being requested. The number reflects a significant reduction of the initial service request for 3,719 specialized personnel, with the compromise reportedly surfacing during the resource panel for Total Army Analysis (TAA) 10-15.

Once formally approved, the 1,511 new EW billets will be assigned from Army Service Component Command at theater level down to battalion level within brigade combat teams and some specific Special Forces companies.

Early Army service training is already under way to help fill these billets. Ongoing examples include not only the additional skill identifier 1 Kilo operator and 1 Juliet planner courses at Forts Huachuca and Sill, respectively, but also the 25 Echo spectrum management course, which is taught at Fort Gordon, Ga.

In addition, the initial groups of students have also graduated from the new 10-week functional area 29 qualification pilot course, held at Fort Sill. The next two pilot courses are scheduled for January and June 2009, with current annual training throughput capacity at approximately 75.

Highlighting the commissioned officer throughput capability, Col. Harper observed: "That's significant because if you do the math on how many Navy EWOs and Air Force EWOs are out there, it's about 300. If I can pump out 75 a year, I can start getting after that requirement to meet the end state, which is in FY 2011."

He went on to note that both EW warrant officer and 29 Echo enlisted courses are also under development and are expected to begin early in FY 2009.

Once formal approval has been received on the 1,511 EW billets in TAA 10-15, with subsequent implementation of a modified table of organization and equipment, the Army can begin recruiting for the new functional area 29 specialty.

"I can actually go out and call up certain people," Col. Harper said. "We can then assess them and cross them over to the functional area from whatever they were doing before.

"FY 2010 and 2011 are when we will start filling the majority of those billets for the Army," he added.

As the USACEWP, the Combined Arms Center is also conducting several materiel efforts, ranging from integrated "quick look" study activities with JIEDDO to coordination with multiple combat/materiel-development organizations to conducting an EW capabilities-based assessment to identify Army EW requirements, gaps and proposed solutions. The assessment was scheduled to be finished in early December 2008, paving the way for follow-on materiel efforts. ★









The West Point Museum

Photographs by Dennis Steele

The West Point Museum, considered the oldest military museum in the United States, originally opened to the public in 1854. It offers a large and diverse collection that represents every American conflict, as well as warfare in general. British artifacts brought to West Point after the British defeat at Saratoga, N.Y., in 1777 were the basis of the collection, and West Point was designated by executive order after the Mexican War (1846–48) as the permanent depository of war trophies.

The museum's collection of weaponry, armor, uniforms and military art is vast, featuring one of the finest military small-arms collections in existence. As one would expect, its collection of items related to West Point as a military facility and later as a military academy is unmatched.

Situated adjacent to the U.S. Military Academy Visitors Center on the grounds of the former Ladycliff College, the museum is housed in Olmsted Hall, named for Maj. Gen. George H. Olmsted, West Point class of 1922. It offers approximately 135 exhibits on four floors of exhibition galleries. The West Point Museum is open daily—with the exception of Thanksgiving, Christmas Day and New Year's Day—from 10:30 A.M. to 4:15 P.M. Admission is free. ★

Hail to the Chief:
The U.S. Army and the Inaugural Parade

By Toni Eugene
Associate Editor

For more than two centuries, the U.S. Army has been a major participant in the inaugural tradition that began when George Washington took the oath of office in 1789. Upon Washington's arrival in New York City from Mount Vernon, Va., members of the Continental Army joined his escort to Federal Hall, where he was sworn in.

Today more than 5,000 servicemembers participate in the inaugural celebration, which includes a parade from the Capitol to the White House. Prominent among them are the U.S. Army Band (Pershing's Own), the U.S. Army Field Band and the 3rd U.S. Infantry Regiment (The Old Guard).

Traditionally, the parade is split into five divisions, each led by marching units and bands from a military service. The Army, as the senior service, leads the first division; the U.S. Army Field Band immediately follows the presidential escort. The members of the band—which performs throughout the world, traveling more than 100 days each year—prepare for the parade for months.

In 2005, during the 55th Inaugural, Pershing's Own led the parade down Pennsylvania Avenue. Some 350 members of the Old Guard, the Army's oldest active infantry unit, participated in the honor cordon and were stationed along the parade route to salute the President as he passed. Other Old Guard soldiers made up multiple marching elements of the parade.



DoD/Journalist 3rd Class David P. Coleman, U.S. Navy

The Old Guard Fife and Drum Corps marches down Pennsylvania Avenue during the 55th inaugural parade in 2005.

The Old Guard Fife and Drum Corps has participated in every inaugural parade since that of President Kennedy in 1961. Its members, wearing period uniforms, play 10-hole fifes, single-valve bugles and handmade rope-tensioned drums to bring to life the music of the Continental Army that escorted Washington.

Early inaugural parades consisted primarily of escorts for the President-elect to the Capitol. The first inauguration to take place in Washington, D.C., the new capital city, was in 1801.

A company of Virginia riflemen, friends and citizens accompanied Thomas Jefferson as he walked from his nearby boardinghouse to the partially completed Capitol. The first organized parade took place in 1809, when a cavalry troop from Georgetown escorted President James Madison to the Capitol. After taking the oath of office, President Madison reviewed nine companies of militia. Military companies from outside the District of Columbia appeared in the parade for the first time during the inauguration of William Henry Harrison in 1841.

At President Lincoln's second inauguration in 1865, the first African-American soldiers—four companies in all—marched in the procession.

The theme of the 2009 inauguration of President-elect Barack Obama—"A New Birth of Freedom"—commemorates the 200th anniversary of Lincoln's birth and was inspired by his Gettysburg Address, in which he expressed the hope that those who died to preserve the nation "shall not have died in vain; that this nation shall have a new birth of freedom; and that this government of the people, by the people, for the people, shall not perish from the earth."

The inaugural theme is traditionally linked to a major anniversary: In 2005, the theme—"A Vision of America"—commemorated the centennial of Theodore Roosevelt's formal inauguration and the bicentennial of the Lewis and Clark expedition's arrival at the Pacific Ocean.

The Armed Forces Inaugural Committee (AFIC) coordinates all military ceremonial support for the entire inaugural celebration. The committee consists of about 700 servicemembers who volunteer for the job. As a committee of the Joint Force Headquarters-National Capital Region, which is commanded by Maj. Gen. Richard J. Rowe Jr., U.S. Army, the AFIC collects all applications from marching bands, marching units, mounted units and all other performers to participate in Inauguration Day events, then forwards them to the Presidential Inaugural Committee, which selects parade participants and plans and funds the inaugural events, including the parade and inaugural balls. The Joint Congressional Committee on Inaugural Ceremonies plans the actual swearing-in ceremony held at the Capitol.

Several million people are expected to attend the parade and the swearing-in ceremony this month. ★

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

CSI: BAGHDAD?

As civil authorities in Iraq and Afghanistan become more capable, the importance of "burden of proof" weighs more heavily on our shoulders. Each mission becomes an opportunity to gather evidence that puts an insurgent behind bars or justifies the decision to kill him. Seizing that opportunity may require actions more akin to an episode of "CSI" than to traditional actions on the objective. Commanders in the CompanyCommand forum recently addressed this topic from several perspectives: What are the resources available to make this work? How are leaders successfully conducting these operations? And perhaps most importantly, is this something Army leaders should even be doing?

Available Resources

Ty Dawson
703rd Explosive Ordnance Disposal (EOD) Company

Let me first differentiate two related terms that are commonly misused: tactical site exploitation (TSE) versus sensitive site exploitation (SSE). For all intents and purposes, our forces use these terms interchangeably, but they do have separate meanings and implications. TSE is a hasty exploitation of a site bringing to bear a small force of Soldiers specially trained by EOD or weapons intelligence teams (WIT) to rapidly gather available evidence in a tactical situation. This would apply to your IED post blasts, your targeted searches, cache recovery and targeted strikes on vetted targets listed on priority-effects lists. SSE is a more involved and higher level of exploitation which will involve "sensitive" subject matter and will require the use of more highly trained operators from other government agencies. It is a much more lengthy process and requires a scene to be meticulously disassembled in order to glean every possible shred of evidence.



Each mission is an opportunity to gather evidence; good investigation of a crime scene includes systematic photographing and cataloging of every item found.

The U.S. Armed Forces have a number of agencies that already possess the institutional knowledge and expertise required to train the force in the area of evidence recovery. The problem we face, by and large, is the lack of emphasis on this subject during train-ups for deployment. We do live-fire exercises. How many live-fire exercises are followed up by evidence collection and biometrics collection, to include DNA swabs, input into biometrics systems, fingerprint cards and major case prints from dead bad guys? The main point I'm trying to get at is that BIG ARMY has elements with institutional knowl-



Patient and meticulous interrogation can produce valuable intelligence to build a better picture of the enemy network.

edge on attacking the problem of forensic collection. Look to your EOD, military police (MP) and criminal investigation division (CID) for assistance. All of us bring separate points of view to a common problem.

Matt Mularoni
545th Military Police Company

I maintain three primary beliefs on the subject.

First, and most importantly, we need to make the decision whether the exploitation is for intelligence/targeting or for criminal prosecution. The reason is that the standards and required chain of custody (along with other legal considerations) are much stricter for criminal prosecution than for the targeting process. In addition, we ensure that whatever we collect/process for criminal prosecution in the civilian courts meets the standards of and will be accepted as evidence by host-nation legal systems.

We need to break down the barriers between intelligence and law enforcement sharing of information. Recently, forensics exploitation battalions have been deployed to Iraq. Full success will require integration and synchronization across all facets of the maneuver, intelligence and military police elements. There is tremendous capability that exists. There needs to be further studies to fully implement the amazing "garrison"/home-station capability in the combat environment, supporting the ground commander and ultimately the Soldier on the ground. It is a function not only of fighting in an asymmetrical battlefield, but also of bringing our "full kit bag" to the fight. I would guess that there is actually very little that we do in the Army that supports only the garrison mission; every possible tool, system and function needs to be added to the fight.

As for the individual Soldier, we do not need a new position added to the squad specifically to be a CSI tech. The asymmetric warfare group (AWG) and Center for Army Lessons Learned (CALL) have a GTA card for rudimentary procedures in this area. I recommend that the Soldiers be identified beforehand in the mission order just as we have identified aid-and-litter and enemy prisoner-of-war teams. It should be added as a basic warrior task taught to all Soldiers.

Brendan Sullivan
E Battery, 5-52 Air Defense Artillery

When I was at the National Training Center (NTC), the observer/controllers (O/Cs) on the Bronco Team developed a training program between NTC and the Los Angeles Police Department (LAPD). The LAPD trained observer/controllers on how to evaluate a crime scene; the Gang Special Division discussed social issues, gang warfare and similarities and contrasts with insurgent groups; the forensic specialist discussed simple forensic testing that could be done in a combat environment. The LAPD also demonstrated software programs used in correlating crimes and predicting future crimes and trends. The main point the LAPD stressed to us was pictures, pictures, pictures, especially from different angles; this enables you to reconstruct a crime scene later, if need be. The biggest difference between police forces and military forces is time on scene. Police can use days to process a crime scene. Military forces, however, don't have that luxury. From the O/C perspective, the biggest challenge I saw was when the evidence was not correlated with the suspect—no forensics, no pictures, no statements, nothing. It is hard to get a conviction under those circumstances. In return, the O/Cs trained the LAPD on the Army combatives program, so this was a win-win situation. This also formed a good basis for

starting the Joint, interagency, intergovernmental and multinational relationships program at NTC.

Brittany Meeks

178th Military Police Detachment, 89th MP Brigade

With proper coordination, I would hope that the local CID and MP units would be able to provide some CID or V-5 personnel to do some training with your leaders on what to look for, what to think about and how to do things properly, like handle evidence so as not to compromise it. Depending upon the size of your post and how robust your DES is (and who the MPs working at the DES are), you may be able to get some training from some of those personnel as well.

Thinking outside the military box, be aware that local and state police departments often have classes at the basic and advanced levels for crime scene processing. While it isn't exactly the same as doing it on the battlefield, the concepts and methodology can transfer over. I am researching and preparing to submit some training requests for my MPs who work military police investigations here at Fort Hood to attend some short Texas Department of Public Safety courses to supplement their knowledge.

Mark Leslie

HHC, 2-7 Cavalry

My adviser team got very good at this as time went on, and it all related back to some training we had done with the local police department prior to deployment. If we are going to put our Soldiers at risk in an engagement, then it is worth the time and effort to ensure that the individuals detained remain detained. I have seen the results of good site exploitation and have testified at trials for guys we detained—the pictures, evidence and good supporting statements are worth the effort. But we won't get good at this unless we train for it like everything else. This training can be done anywhere and is low cost and effort. Describing a situation from your memory banks and having several guys write statements on it is one way. Creating pseudo CSI kits and training with them is a necessity and must be incorporated into your home-station training. Make it a battle drill—end all squad-and-above training with some form of site exploitation event. We are not out to be crime scene experts, but we must be good enough to ensure that our efforts are not wasted when we detain an individual.

We were fortunate that we had developed a rapport with the local police through some shared training with snipers and urban ops. Once we started looking at the environment in Iraq and understood that TSE/SSE was part of the battle rhythm, we asked for help on this as well. Our usual POCs were willing to help. They showed us the basics of collecting evidence—securing a scene, taking photos, labeling every ziplock bag correctly and connecting it to an individual—and went through sworn statements with us. Then a detective sat down and talked to all my lieutenants about questioning and everything else his fellow officers had discussed, but with more detail and from a detective's perspective. We then went back and worked this into our battle drills. All these skills were difficult to do with the exception of the sworn statement piece. We worked with the S-2 until we were masters of writing sworn statements even prior to deploying, and we got better as we went along. At the request of the S-2 and CSM, my NCOs actually ended up giving a class to other Soldiers on writing sworn statements.

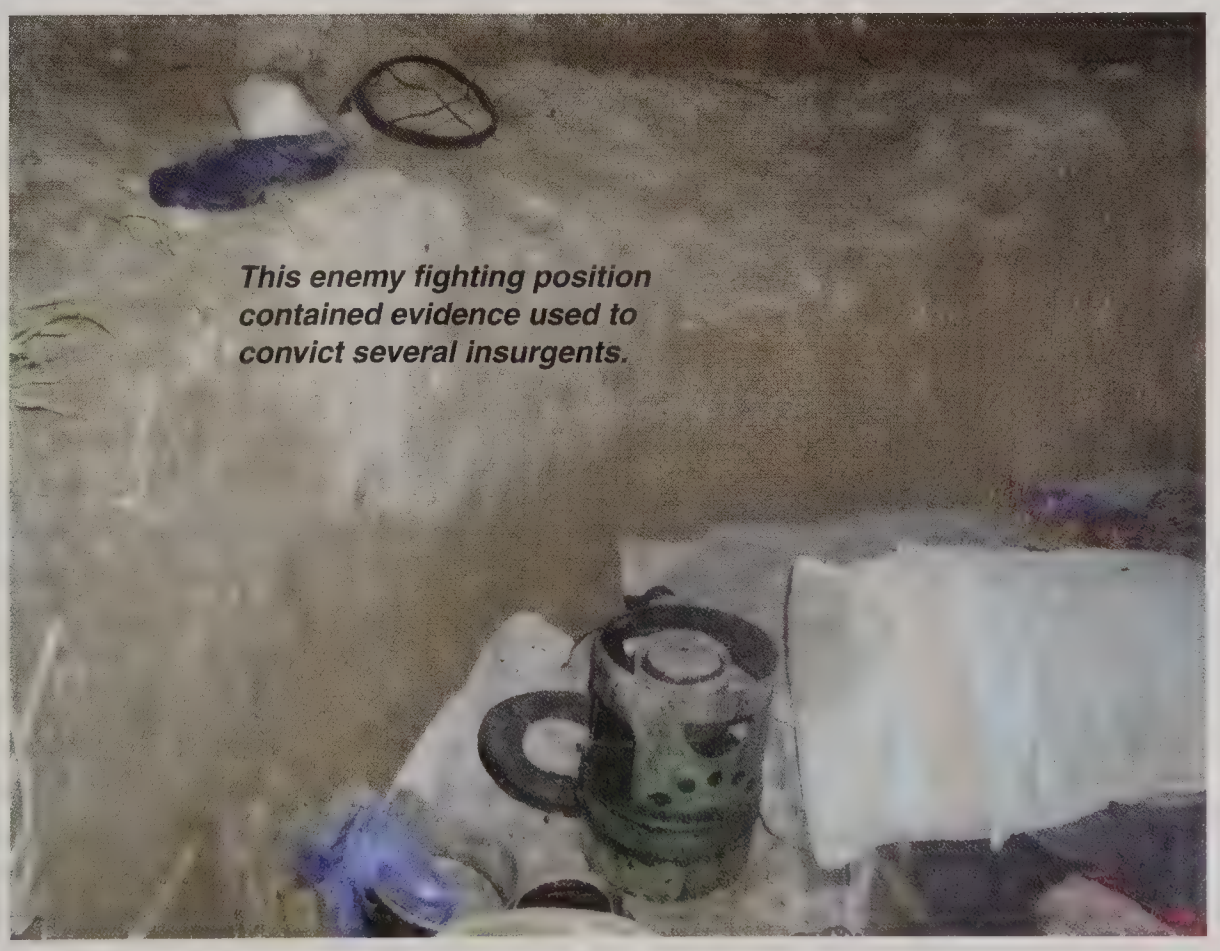
Leaders in Action

Jason Holder

B Company, 2-505th Parachute Infantry

Site exploitation was not something we trained for prior to deployment, but it was a skill we quickly picked up in Kuwait and during our LS/RS rides with the outgoing unit. We treated site exploitation like any other battle drill—as if it were merely an extension of Battle Drill 6. During the patrol brief and/or raid OPORD, squads were tagged as search teams, recorders, photographers, security, tactical questioning, etc. Each team had a specific task and purpose during site exploitation.

On top of the physical act of searching a room or house is the oh-so-fun phase of filling out all the paperwork, documenting the pictures, labeling the detainees and linking them to any contraband found on the site. This is sometimes more time consuming than the actual raid itself. Troopers must be patient, diligent and meticulous. It could mean the difference between a definite bad guy being sent to jail or set free.

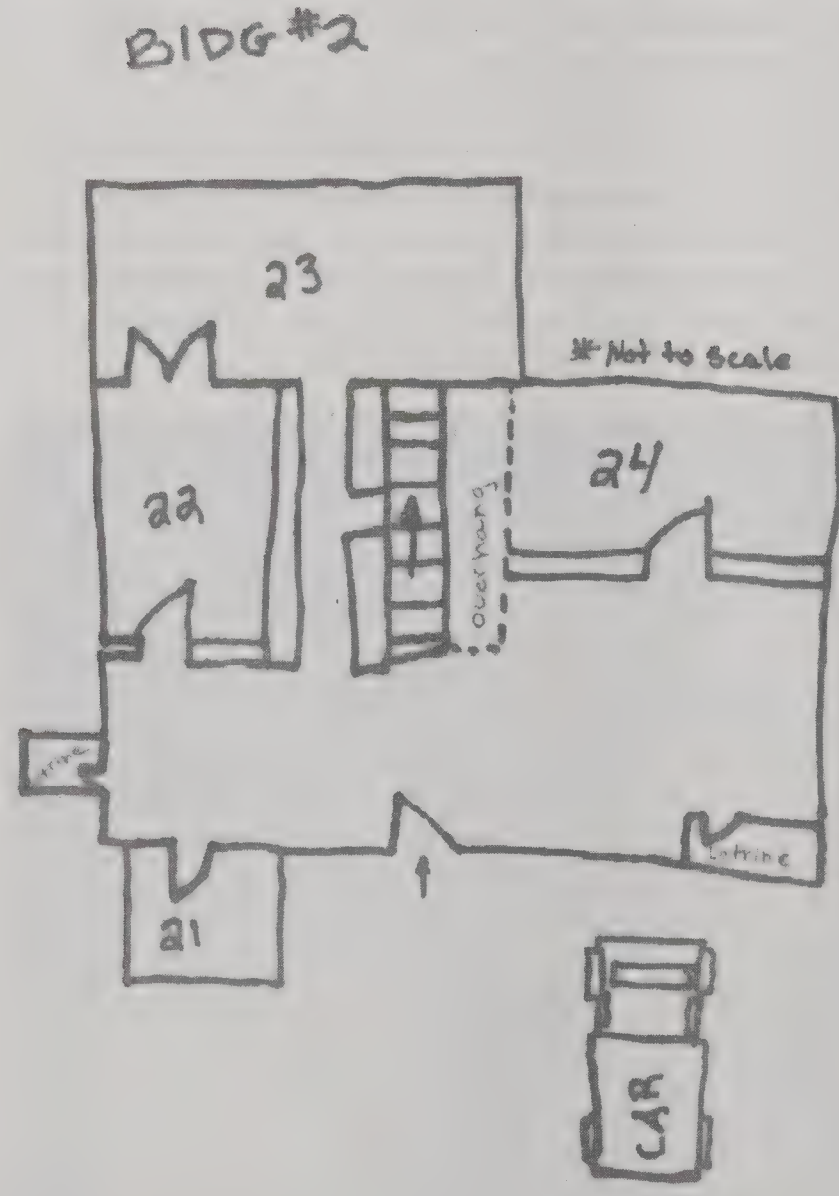


This enemy fighting position contained evidence used to convict several insurgents.

The good news is that—as with anything else troopers do—training, rehearsals and repetition allow us to get on and off site faster and faster. The AWG helped us refine our SOPs and were extremely helpful. Site exploitation is something troopers can rehearse and train anywhere—motorpool, LSAs, etc. Talk of getting local police involved or creating new MOSs is great in theory, but the reality is that infantrymen, tankers and artillerymen are executing this mission right now with great success.

David Gohlich
I Company & HHC, 3-2 Stryker Cavalry

The first thing we did was to standardize a detainee/evidence kit for each squad. This was one of the things I inspected as a commander during PCIs. Each squad carried one in their Stryker. The bag they used did not matter, but what they put in it was standardized. It varies depending on where/when you are in Iraq, but some of the things we included were: flex cuffs, blindfolds, large and small ziplock bags, markers, notebook (for house/room layout sketches), ink pad (for finger prints), evidence tags, Iraqi and American sworn statement forms, two digital cameras. You can get some of this from the unit you are relieving, and the rest evolves over time. The "wouldn't-it-be-great-if-we-had-one-of-these" becomes standard for all kits the next day.



Soldiers should sketch and photograph each site and gather and bag each piece of evidence in order to build a case that will hold up in court.

We also chose one NCO per platoon to be the evidence guy, with another NCO as an assistant. He was the one in charge at the scene to make sure the sketch gets done, to decide what evidence is kept and what is left, and to organize all the statements. This NCO was the same one who was responsible for turning over the detainees or evidence to the Coalition prison facility or the Iraqi justice system. This allowed the NCO to talk directly with the CF or Iraqi in charge of taking the detainee/evidence and work out any issues directly. The Iraqi system is constantly evolving, and we learned a lot by trial and error. The important thing is to sit down every few days, share lessons learned, and update TTPs and detainee kits.

Our JAG lawyer also ran a great class for our interpreters on how to fill out an Iraqi sworn statement. It took a few classes to get all of them to catch on, but it was a great asset. The PL or PSG could focus on the big picture and not have to walk the interpreter through the statement, and then the interpreter could explain directly to the local national how the form is filled out. It saved a lot of time.

Finally, double-check everything. Use two different cameras to get all photos. Have the PL or PSG check all the photos, evidence, sketches and statements. Two months later when your detainee is on trial, it will be too late to go back and fix anything you left out. If one camera dies and cannot download photos, you have a backup. It must be done right the first time. A good set of photos with the detainee clearly visible next to IEDs/weapons (and no Americans in the photo) goes a long way in Iraqi courts.

While you get the usual grumblings in the beginning—"I'm Infantry, not CID/MP"—once the guys saw that collecting evidence the right way made sure these guys get put away, they really took to it. The bad guys are not dumb. They know when you are collecting evidence the right way, and it gives the interrogator more leverage to use. When you have enough evidence to put the guy away for 10 years, the detainee tends to be more inclined to talk, as opposed to if he thinks he faces merely a six-months-and-out visit to prison.

Melinda Morin
34th RAOC, New Hampshire National Guard

Keep the scene clean. I worked an issue last year when a unit's linguist was identified as a potential threat due to his presence at a site where forensics info of interest was collected. Units need to ensure their linguists are not contaminating the scene by handling evidence without proper protective equipment. Indigenous assigned personnel, specifically linguists, should *always* wear rubber gloves when entering a site and assisting U.S. forces. Otherwise, site exploitation picks up their fingerprints, creating an erroneous hit in the system. Biometrics works pretty well, and its effectiveness creates an unnecessary hassle for the installation access control, the unit and the individual erroneously identified as a current threat. We briefed the new unit, which took over (the assigned linguists), and they established good forensics practices with regard to their linguists. I never saw the same



Each crime scene—indoors and out—should be carefully and thoroughly searched to maximize exploitation of the site.

issue again with that unit. Policing the site of *any* event where LNs are working with U.S. forces is necessary to avoid erroneous identification issues.

David Smyth

Rapid SSE is not difficult, but it does require a good SOP. As soon as you secure the objective, you've got to begin the SSE process. You must film/photograph each room in exactly the same manner, every single time (left to right in a clockwise manner) and gather as much unadulterated evidence as quickly as you can. This means everyone has to wear gloves, carry plastic bags and have a naming convention that clearly identifies where the evidence was found (for example, Compound 3, Building 1, Room L3). You don't have to carry a lot of specialized equipment, but you do need to practice. In addition, military intelligence facilitators can help by bringing biometric collection devices (digital retinal and fingerprint scanners) that can save you a lot of time and have far less tendency to be corrupted. If you don't have an airtight case, chances are the guy is going to go free. Other assets to take advantage of are FBI and DEA agents who may be operating in your battlespace. The DEA can assist you in preparing a good drug case against an insurgent. The FBI is second to none when it comes to forensic investigation.

Should We Even Be Doing This?

Michael Stock

C and HHT, 4-7 Cavalry

As a maneuver commander and former maneuver platoon leader, I want to get this straight. Our Soldiers aren't evidence collectors, prosecutors or detectives—they are cavalrymen and infantrymen. We are trained to seek and kill the enemy. With a force now strapped in regard to manning and training, we do not have the resources, manpower or time to dedicate to this kind of training beyond the basics. Let other government agency teams do this, and leave the ground pounders to do what they do. Our Soldiers need to understand the objective is where "actions on contact" happen in both low- and high-intensity conflicts. To even propose loaning out Soldiers to "observe" the Iraqi police force is absolutely ridiculous! I need these men on the ground, within the populace, patrolling and killing bad guys.



A scarred mosaic of Saddam Hussein rises behind Capt. Paul Mills, HHC/2-124 IN, at the former Baath Party headquarters in Kirkuk, Iraq.

John Stroh

C Troop, 1-75 Cavalry

As a company commander and transition team (MiTT) chief in Iraq, my U.S. Soldiers (all infantrymen) personally conducted SSE on only those sites that the U.S. Army actually had an interest in prosecuting. Those sites contained evidence that would put an insurgent/terrorist in jail who had planned against, attacked or killed U.S. Soldiers. We had reason to be meticulous in our collection of evidence and documentation because we wanted these folks in jail.

In my opinion, the only other reason for maneuver Soldiers (non-CID types) to meticulously conduct SSE is for intelligence purposes—not for the courtroom. The best part is that our Army has been doing this for decades. The S-2s in higher echelons simply need the information/items to build a better picture of the enemy network, objectives and plans in order to build better target packets and hone in on our enemies. In my opinion, getting the evidence up to higher levels is no different from submitting a patrol debrief. It should be collected thoroughly, carefully and as soon as possible, but not necessarily to a courtroom evidentiary standard.

On MiTT missions, our objectives were Iraqi army targets, and we always made the Iraqis do the SSE. First, they do all their paperwork in Arabic, which is the language the courts use in Iraq. Second, it's *their* rule of law, prosecution system and penal system, so *they* need to enforce/support it. Finally, this technique meant that Iraqi soldiers, *not* my Soldiers, would be called to court as witnesses. Of course, we had to train Iraqi soldiers to do these tasks, but after just a few missions they were quite proficient—at least to their standards.

We need to give our Soldiers credit for their ability to conduct what truly is not a complicated or difficult task. No offense to CID or any other investigative service, but collecting evidence (including fingerprints and blood samples for DNA) was a common task for 11Bs in my company—and we had plenty of successful prosecutions despite our novice and rudimentary efforts. The most important part is keeping our leaders focused on *why* we do it. I always sought to do SSE only when it counted: for certain prosecution of really bad guys or for intelligence purposes.

Paul Mills

HHC/2-124 IN, FLARNG

The reality on the nontraditional battlefield is the ability to manage a crime scene. Insurgency activities have evolved from unsophisticated bands with local objectives to well-organized, interrelated philosophies using legitimate and illegal resources for funding. The fight is not limited to the battlefield—it continues at Internet cafes, places of worship and banks. Commanders at all levels and specialties have to buy into the importance of TSE/SSE and, subsequently, teach basic fundamentals of crime scenes.

Concluding this discussion, one commander pointed out that the manual for sensitive-site operations is FM 3-90.15, available on Army Knowledge Online. The manual addresses everything from past operations and lessons learned in Vietnam, Kosovo and Bosnia to current operations with Army assets in today's operating environment. Are you a commander with experience in this field? Come to cc.army.mil and join the conversation!



Soldier Armed

Video Unmanned Aircraft System Intelligence Teaming (VUIT)-2

By Scott R. Gourley

At the same time that service and industry team members are enhancing flight tests of the next-generation Apache Block III aircraft, a prototype U.S. Army Apache battalion recently arrived in theater equipped with revolutionary new tactical capabilities.

Called video unmanned aircraft system intelligence teaming (VUIT)-2, the kit-based system enables Apache aircrews to view streaming video and metadata from the Shadow, Raven, Hunter, Predator, Warrior A, Reaper and other unmanned aircraft systems (UAS), providing Army Aviation with a manned-unmanned teaming capability that significantly improves battlefield intelligence, surveillance and reconnaissance, as well as targeting and acquisition.

"VUIT-2 is a datalink system for the Apache aircraft that will enable the Apache crew to see real-time video from unmanned aircraft systems that are flying overwatch in theater and display that video on the multifunction displays right in the cockpit," explained Bill Murtha, Lockheed Martin VUIT-2 program director. "VUIT-2 also provides the ability for the Apache to downlink 'own sensor' video from the multisensor towed array detection system (MTADS) or the unmanned aircraft video that it is receiving down to ground forces that are equipped with the OSRVT—the one system remote video terminal."

"The acronym speaks for itself," added Lt. Col. Robert Johnston, U.S. Army product manager (PM) for Apache Sensors.

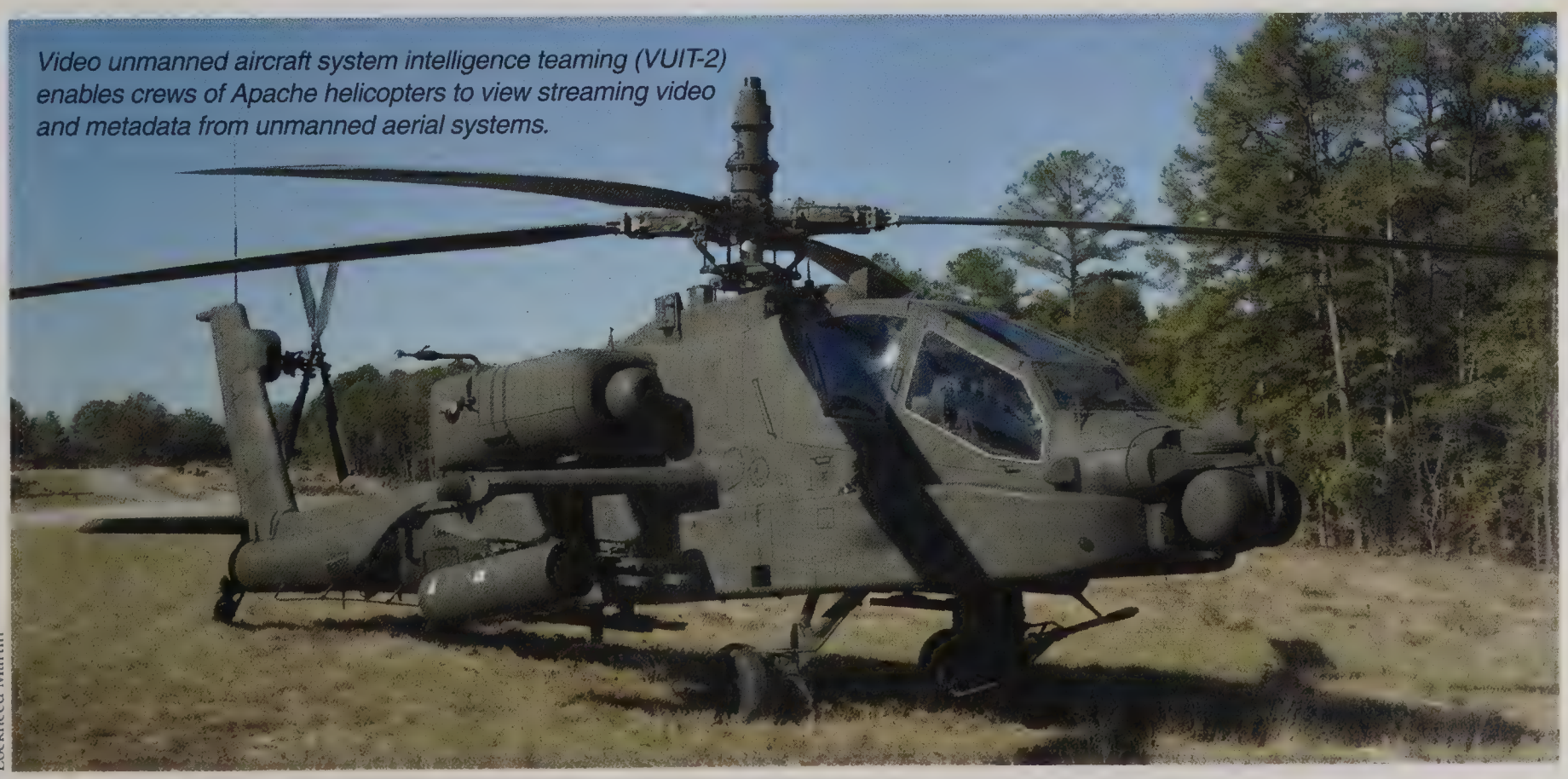
"It's video from UAS for interoperability teaming. It actually receives video from unmanned aerial vehicles (UAVs) and then also provides the ability to send the Apache MTADS video to local supported ground commanders."

Noting that the OSRVT is currently used on some platforms in theater, including the A^2C^2S Black Hawk, Stryker vehicles and elements of Task Force ODIN (observe, detect, identify and neutralize), he added, "This is similar to Task Force ODIN except that it's installed on the Apache.

"It solves the problem of sharing information," Col. Johnston continued. "As you're coming up onto an area, and you're supporting some troops in contact, they are describing to you what's going on, where the bad guys are located, which white vehicle with the orange fender is the actual bad guy. That's hard to do via voice. But if you can send a picture or streaming video of the situation, that gives clarity and real-time situational awareness. Ultimately it reduces the sensor-to-shooter timeline that the Army is on a quest to reduce, getting inside the enemy's decision-making cycle."

The program was built on the success of the 2006 hunter standoff killer team (HSKT) advanced concept technology demonstration (ACTD).

Program participants noted that the previous Vice Chief of Staff of the Army, Gen. Richard Cody, initiated VUIT-2 as a quick reaction program to provide Apaches with the ability to see the video provided by an increas-



Video unmanned aircraft system intelligence teaming (VUIT-2) enables crews of Apache helicopters to view streaming video and metadata from unmanned aerial systems.

Lockheed Martin



Robin Cofer, Apache PM Contractor

A VUIT interface panel (left) and VUIT power panel in the cockpit operate the VUIT-2 system installed in a prototype Apache battalion that recently arrived in theater.

ing number of UAS flying in theater.

"We met with PM UAS back in 2007, and we put together a quick plan, a seven-page briefing chart, and took that idea to Gen. Cody," Col. Johnston said. "Gen. Cody said, 'I like the program.' By June 2007 we had a directed requirement signed by the G-3 of the Army."

Emphasizing the partnership between the Army and industry to make this happen in record time, Murtha added, "From the kickoff meeting for that quick reaction capability program until it was flight demonstrated was six months, which is really very rapid in today's acquisition cycles."

"I would emphasize that this is truly a very good partnership between the Army and industry. From an Army perspective, PM Apache is obviously the leader here. AATD [Army Aviation Applied Technology Directorate] at Fort Eustis, Va., is the integrator of the first unit and has led the flight-testing activities. PM UAS has supported the activity. From an industry standpoint, Lockheed Martin is the prime system integrator. And we are working closely with L3 Communications in Salt Lake City, Utah, and AAI, a unit of Textron, in Baltimore, Md., as well as a number of other subcontractors," Murtha said.

"We identified the first unit and we brought the unit in to do the training for VUIT-2," Col. Johnston continued. "From the HSKT experience, I knew there was going to be a lot of 'push-back.' People are resistant to change, and new concepts and ideas sometimes aren't easily recognized by newcomers. So we went through a process here in Huntsville, Ala., where we brought in the senior pilots from the unit it was going to—the standardization instructor pilot, the instructor pilot, senior front seaters, the tactical operations officer—and sat them down and trained them on VUIT using an Apache training aid, developed here by Camber, which goes through the 'A kit,' the 'B kit' and the system of VUIT in component detail. Then we put them in the simulator and had them doing missions using VUIT with the video feed into the cockpit. We went through scenarios like that. The very last scenario returned to the traditional way of not having that video feed into the cockpit, just so they would get a clear understanding of the difference between VUIT and 'not VUIT.' When they finished that mission, they were all convinced. One of the slogans that came out of this initial train-up period was: 'Without VUIT, you can't do it.' The unit has fully bought into the idea of manned and unmanned teaming."

The government and industry team is currently involved in activities to move to production the QRC/prototype battalion design to make VUIT-2 more maintainable and sustainable for follow-on battalions.

"Obviously we would like to field, per our directed requirement from Department of the Army headquarters, up to 10 battalions," Col. Johnston explained. "The funding for that program has yet to arrive. So we are doing a little bit of production activity and trying to keep the team together at Lockheed Martin. Through AATD's initial contract with Lockheed Martin for the prototype battalion, we have been upgrading the current battalion's capability through software improvements, based on lessons learned from the unit at National Training Center. Yet another software build is coming in later, and we are going to take lessons learned from their initial few months in theater so we can make additional improvements to the prototype system. Ultimately, when the funding arrives from the Army, which is expected in the fiscal year 2009 supplemental budget, we will try to put Lockheed Martin on contract, pending sole-source authorization, and then move forward to build 10 battalions."

Program representatives were careful to clarify that the Army's end-state requirement for Apache remains Block III, which includes Level 4 ability to control the UAS itself. However, VUIT-2 provides a critical "bridging capability" toward that eventual end state.

"On the Block III bridging strategy, our plan is to install VUIT on our Block II aircraft that will be in the fleet until 2025," Col. Johnston said. "So, as Block III starts fielding in 2011, the VUIT-2 system that we are paying for now will still be out in the field. It's not just out there until the start of Block III. It's going to take time to get the fleet fully modernized to Block III. We will get use out of the system through 2025."

Reiterating that the first VUIT-2 equipped battalion had just arrived in theater, he added, "We are eagerly awaiting feedback from the unit." ★

AUSA Sustaining Member Profile:

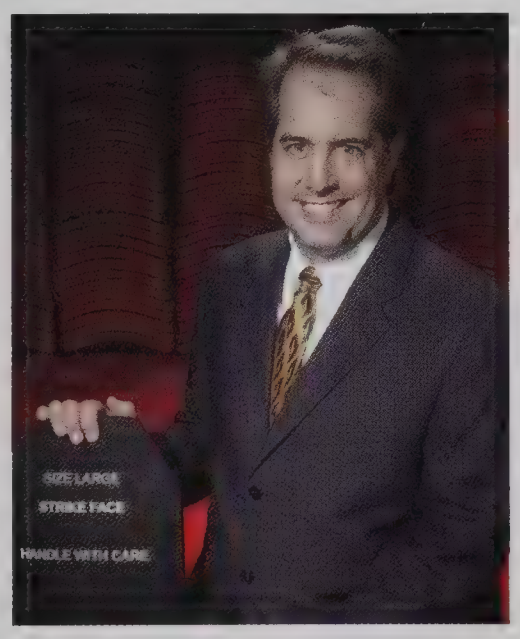
ArmorWorks Enterprises

Corporate Structure—Founded: 1996. President and Founder: William J. (Bill) Perciballi. Address: ArmorWorks, 305 North 54th Street, Chandler, AZ 85226. Telephone: 480-517-1150. Web site: www.armorworks.com.

Since 1996, ArmorWorks Enterprises LLC has provided cutting-edge survivability products for the U.S. military and law enforcement agencies. ArmorWorks designs, tests and produces protective lightweight armor, from personnel body armor systems, vehicle armor systems, aircraft flooring systems and shipboard armor to energy attenuating (EA) floor-mounted seat systems.

ArmorWorks combines state-of-the-art ceramic and composite materials and objectively evaluates and tests them to ensure their performance in all environments. This technology provides the lightest, most reliable ballistic armor for body, aircraft, shipboard and vehicles.

ArmorWorks produces multiple configurations of its small-arms protective inserts (SAPI) body armor and other systems, including Airsave, vehicle body armor support system, side SAPI and National Institute of Justice Level IV systems. The company has tested more than 200 different configurations of the SAPI body armor systems—consisting of more than 1,000 plates—for government use.



Bill Perciballi, President and Founder

ArmorWorks vehicle systems are designed to meet the military's goal of fielding a lighter, more rapidly deploying force to meet 21st-century requirements while providing protection against a broad spectrum of ballistic threats. ArmorWorks armor is combat proven and has consistently received high marks from independent third-party ballistic testing conducted at H.P. White laboratories. In addition, ArmorWorks armor has received an Army safety release from the U.S. Army Test and Evaluation Command, verifying the protection offered by its kit against small arms, mines and full-scale improvised explosive device (IED) blasts.

ArmorWorks uses a modular armor approach for vehicle protection, installing a space frame that accepts standard armor panels that are interchangeable with other panels throughout the vehicle. Compared with conventional steel armor kits, this lightweight armor gives vehicles extended life while maintaining vehicle maneuverability.

ArmorWorks has evolved from supplying basic aircraft armor requirements, starting in 1996, to designing and manufacturing completed aircraft armor systems—aircraft kits that meet the weight and threat needs of today's modern military aircraft. ArmorWorks currently provides various types of aircraft armor, including seat armor for crew seats in the CH-47, OH-58 and MD-500 helicopters; cockpit floor armor and main cabin armor for MH-60, HH-60, CH-47, CH-46 and UH-1 Huey aircraft; and engine and transmission armor for the entire CH-46 fleet. ArmorWorks kits can be customized to meet any mission requirement at necessary weight and ballistic protection levels. ArmorWorks aircraft armor is easily installed and removed by unit-level personnel and, in most cases, requires no special tooling.

After eight years of research and development work under multiple small-business innovation research grants from the U.S. Army and U.S. Marine Corps, in 2006 ArmorWorks developed the ShockRide energy attenuating seating program. This program was started in order to provide protection for crew members from the extremely high lumbar forces that occur during a mine or an IED blast. The ground vehicle market required ArmorWorks to provide maximum operational efficiency, a greater protection level and comfort for the occupants. Separate designs for troop seats, driver seats and commander seats were developed with state-of-the-art technology at the lowest cost for these advanced ground vehicle seating systems. ShockRide seats include stand-alone modular bench seating designed specifically for the Bradley infantry fighting vehicle.

During the development of ArmorWorks energy attenuating seating systems, the company worked hand in hand with the U.S. Army Research Laboratory in testing and validating the seats. The first-generation seating systems were deployed for the General Dynamics advanced assault amphibious vehicle or expeditionary fighting vehicle.

The second-generation EA seating system was developed and delivered for live-fire testing to the BAE Land Systems mine resistant ambush protected (MRAP) vehicle program in January 2007. This live-fire test at Aberdeen Proving Ground, Md., included other seat manufacturers in a head-to-head competition using fully instrumented anthropometric mannequins to quantify the performance of the seats. Instrumentation on the vehicle provided measurements of the g-loading imparted to the vehicle from the blast, and instrumentation attached to the mannequins showed how well the EA system on each seat reduced the g-loading to its occupant. After the live-fire test, ArmorWorks was awarded the contract for all crew seats for the BAE RG-31 and RG-33 MRAP programs.

ShockRide delivered its 500th vehicle set of the Bradley advanced seating system mine-blast bench seating system to BAE Land Systems in July 2008.

ArmorWorks has produced more than 1.3 million ceramic armor components that are currently in service around the world. The company's engineering and fabrication services take projects from concept to production, using the materials and systems that best suit the needs of the project based on the customer's requirements.

"We are driven by our commitment to deliver the finest survivability products for our warfighters," said ArmorWorks Enterprises president and founder, Bill Perciballi. "Count on ArmorWorks to solve your most challenging protection problems. At ArmorWorks, your life is our business."

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Reviews

Man of War: Britain's 'Greatest Briton'

Warlord: A Life of Winston Churchill at War, 1874–1945. *Carlo D'Este. HarperCollins Publishers. 864 pages; maps; black-and-white photographs; index; $39.95.*

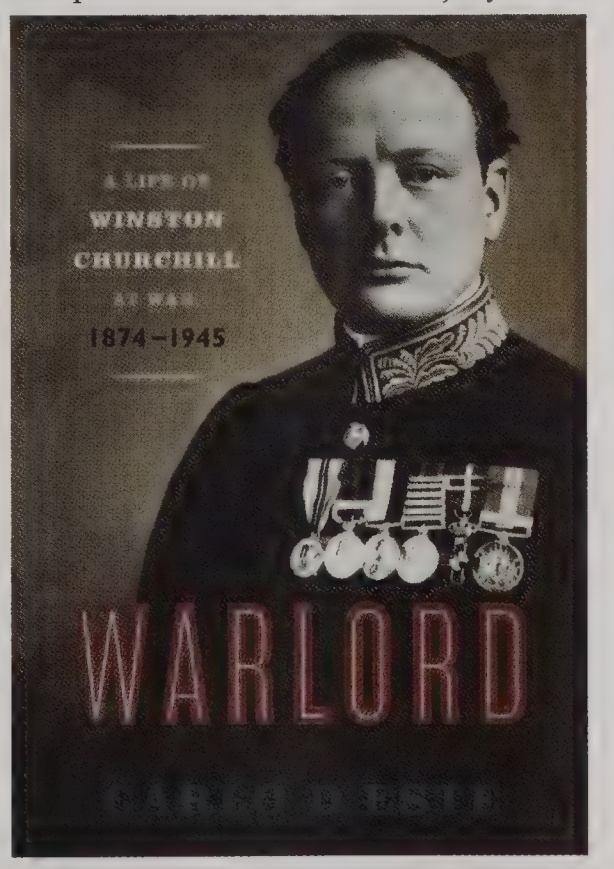
By Col. Cole C. Kingseed
U.S. Army retired

Voted "the greatest Briton" in 2002 by viewers of the BBC, Winston Spencer Churchill continues to loom larger than life. In his own words, Churchill viewed his life as "an endless moving picture in which one was an actor. On the whole, great fun!" While numerous biographers have addressed Churchill's private and political life, few have viewed the enigmatic leader from a purely military perspective. Noted military historian Carlo D'Este fills the gap with *Warlord: A Life of Winston Churchill at War, 1874–1945.*

The author of six books, D'Este first achieved critical acclaim with *Decision in Normandy,* published on the 40th anniversary of D-Day. His subsequent biographies, *Patton: A Genius for War* and *Eisenhower: A Soldier's Life,* have placed him in the forefront of military historians. In undertaking his study of Churchill, D'Este did so with a degree of trepidation. He need not have worried.

What differentiates *Warlord* from previous biographies of Churchill is D'Este's appraisal of Churchill's extraordinary life through the prism of a soldier. D'Este's Churchill is a man "born for war," as Napoleon once described himself. D'Este makes a convincing case that "politics may have dominated [Churchill's] life, but soldiering was a passion he never lost during his political rise." While political office and its myriad powers were Churchill's ultimate goal, he "never strayed far from his military roots." Indeed, D'Este posits that it was the "military Churchill who made possible the political Churchill."

Winston Churchill viewed war as "the greatest of all stimulants." From his graduation from Sandhurst in 1894 to his appointment as British prime minister in 1940, military action colored Churchill's life. His initial test of combat occurred on colonial India's northwest frontier in the last decade of the 19th century. He later participated in one of history's final cavalry charges at Omdurman, in present day Sudan, during the Mahdist War in 1898. More than once he miraculously escaped death and serious injury.



Later, Churchill served as one of England's most recognized war correspondents during the Second Boer War. His escape from a Boer prisoner of war camp catapulted Churchill to the status of a military hero. Following his dismissal as First Lord of the Admiralty in the wake of the Gallipoli disaster in 1915, Churchill commanded a battalion with distinction on the Western Front during World War I.

In the period between the world wars, Churchill lived in political obscurity. Haunted by the memory of a disapproving father and the ghosts of Gallipoli, Churchill was considered by many "a hopelessly obsolete, old-fashioned warrior." The rise of Adolf Hitler and Germany's inexorable march toward war changed all that and resurrected Churchill's career. Bending to political pressure, British Prime Minister Neville Chamberlain returned Churchill to his former position as head of the Admiralty when Germany invaded Poland in 1939. Within a year, Churchill replaced Chamberlain as prime minister and rallied a beleaguered nation for war.

The responsibility that Churchill assumed as prime minister in his country's darkest hour was unlike any other faced by a British leader in its history. Through his unparalleled rhetoric and his iron tenacity, he rallied Great Britain. Nor would Churchill tolerate any pretenders to his position as British warlord. As he remarked to Lord Boothby, "It took Armageddon to make me prime minister. But now that I am there, I am determined that power shall be in no other hands but mine."

Churchill's initial years as prime minister and minister of defense were characterized by as many failures as successes. The Battle of France, the fall of Dunkirk, the Norwegian fiasco, the fall of Singapore and his Mediterranean misadventures were balanced by the Battle of Britain, El Alamein and his selection of military commanders. In his quest for generalship, Churchill was more often right than wrong. His appointments of Generals Alan Brooke and Bernard Montgomery as Chief of the Imperial General Staff and commander of Eighth Army, respectively, were inspired.

No aspect of military policy escaped his attention. Though Churchill remained "hopelessly naïve when it came to logistics," D'Este makes a compelling case that Churchill was quick to fully embrace Bletchley Park's code-breaking success, and Churchill also played a major role in developing a single intelligence service. The prime minister served as a strong proponent

of the development of new weapons to be used in special operations behind enemy lines. In addition, Churchill's unwavering support of the scientific community was vital for the creation of artificial harbors, radar and other devices that paved the way for the successful return to the Continent in 1944.

The years 1944–45 witnessed a downward spiral of Churchill's fortunes, his influence and powers of persuasion greatly diminished. After D-Day, Churchill's role as a warlord remained inconsequential, as the prime minister understood that the postwar world would largely be in the firm grasp of Britain's wartime allies. More than ever, Gen. Dwight D. Eisenhower seized the strategic reins for the final defeat of Nazi Germany. Churchill's rejection by British voters in July 1945 in the aftermath of V-E Day was a political defeat from which he never fully recovered.

To his credit, D'Este has portrayed his subject warts and all. The finished portrait is not altogether flattering. At best, Churchill represented the indomitable spirit of a defiant nation at war. At his worst, the future prime minister was an "ego-driven, self-assured man, secure in his beliefs, and unmoved by dissent," a shameless self-promoter with driving ambition.

In short, *Warlord* is D'Este's finest biography to date. By focusing on the military Churchill, D'Este exposes a hitherto less-known persona. Churchill may have felt that he had failed to meet his own exceptional high standards of greatness, but history has judged differently. As Clementine Churchill telegraphed her husband on V-E Day at the conclusion of the European war, "My thoughts are with you on this supreme day. It could not have happened without you." D'Este adds, "Indeed not."

COL. COLE C. KINGSEED, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

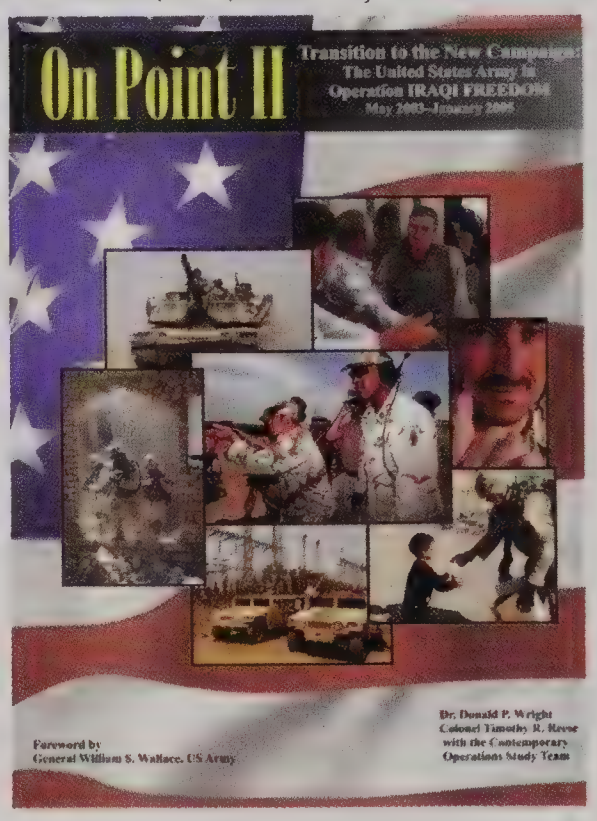
Comprehensive Chronicle of OIF

On Point II: Transition to the New Campaign: The United States Army in Operation Iraqi Freedom, May 2003–January 2005. *Dr. Donald P. Wright and Col. Timothy R. Reese, with the Contemporary Operations Study Team. Combat Studies Institute Press. 696 pages; black-and-white photographs; maps; figures; index; $35.*

By Col. Gregory Fontenot
U.S. Army retired

On Point II is the consequence of decisions made first by Gen. Eric Shinseki and subsequently by Generals Kevin Byrnes and William (Scott) Wallace to chronicle Army operations in Operation Iraqi Freedom. What has emerged is a breathtaking effort to write an account of ongoing Army operations both in Iraq and Afghanistan in the tradition of the Center of Military History's World War II "green books." In telling the story of World War II, Hugh Cole (one of the best green book historians), Kent Roberts Greenfield, Charles McDonald, Martin Blumenson and a host of other brilliant young historians set a high standard for those who are willing to write history soon after the moment rather than waiting for the dust to settle. The *On Point* effort seeks to meet that high standard.

On Point II is the second in a series; the first effort, *On Point*, covered the preparation for and liberation of Iraq. Ultimately, the series will include volumes examining both Operation Iraqi Freedom and Operation Enduring Freedom (OEF), the subject of the next



undertaking. The purpose of the *On Point* effort is exactly that which Cole claimed for the green books—to tell the story while the generation whose story it is will be able to read it and the Army in which they served can benefit from it. It is this legacy that Dr. Donald Wright, Col. Timothy Reese and their Contemporary Operations Study Team have taken on at the direction of Gen. Wallace, who tasked them to produce "an analyzed, researched chronicle of the events that says, 'Here's what happened and here are the implications thereof.'"

This is heady and not without risks. Cole laid out the risks in a number of forums, perhaps best for an audience of his peers—other Army officers—at the Armor School in 1949. In eight short pages, which he must have delivered in about half an hour, he made the case for military history—a case that remains a brilliant argument today. Chiefly, he argued for writing and studying history in the Army while admitting that the business of learning lessons from history is a "very ticklish thing indeed." Cole believed that history enables context both for understanding wars just fought and those which might yet be fought. History, then, was the "one solid bridge … between the hard facts found on the battlefields and the theory of what the battlefield of the future may be like." In Cole's mind, armed with this understanding, soldiers might better prepare for the future, perhaps avoiding mistaken doctrine and uninformed choices in combat development.

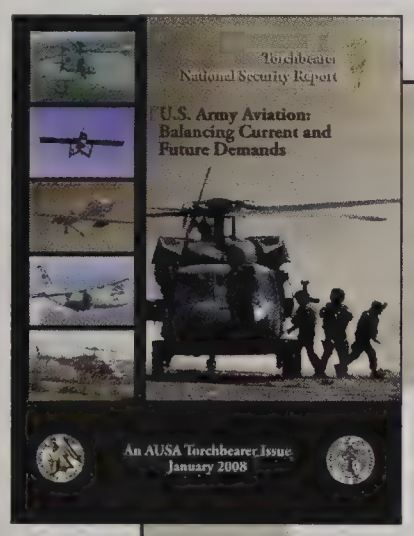
On Point II is part of the structure that will enable the Army to "bridge"

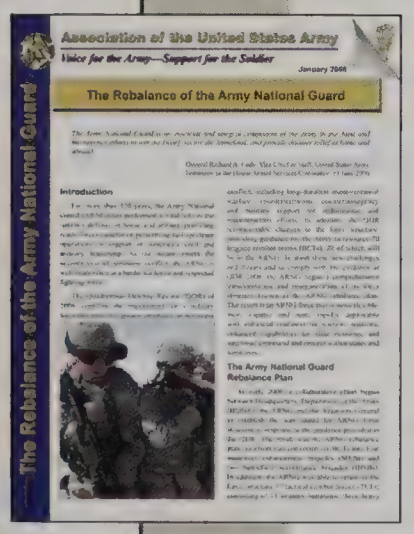
events on the contemporary battlefield to other combat operations that almost certainly lie ahead. Wright and Col. Reese are also not unwitting of the "ticklish" nature of using history—let alone writing history—while the guns are still smoking. In a carefully crafted introduction, they cite a number of problems that have plagued authors of contemporarily written history "since the era of Herodotus and Thucydides." These include, they say, a "lack of perspective," classification of many of the sources and the sheer volume of information measured in terabytes which, when printed, no doubt will amount to tons of documents, images and other data. What they do not say is to what extent some of their sources may have attempted to influence their inquiries.

Their central theme—indeed, their thesis—is that the U.S. Army made "an astonishing number of transitions between May 2003 and January 2005." *On Point II* is a narrative of these many transitions, which are presented thematically. Accordingly, the book is organized in four parts: "Setting the Stage," "Transition to a New Campaign," "Toward the Objective" and "Sustaining the Campaign." The book concludes with a chapter assessing the implications of the authors' work and a brief epilogue which, in the main, underscores the reality that the U.S. Army and its colleagues in the other services and the Coalition could not achieve the objectives for Iraq.

Wright and Col. Reese make their case well and with integrity. They are not loath to criticize the Army, instead letting the story go where it will. For example, in discussing the failure to prepare adequately for the transition, which is the core of their narrative, they make it clear that the general officers in charge cannot be absolved of responsibility for the failure of the transition on a number of counts, but they do so adroitly. They point no fingers; rather they let the leadership implicate themselves. Lt. Gen. William Webster, then-deputy commander of Coalition Forces Land Component Command (CFLCC), observed in an interview that "there was seriously not anything but a skeleton of Phase IV until very late." Not only is this absolutely right and an indictment of then-Secretary of Defense Donald Rumsfeld and his staff, who were in large part responsible for that problem, but also of the Army's leadership—including those who served in CFLCC.

The authors do set the context clearly. The Army and CFLCC got a lot of "help" from Central Command and the Department of Defense. CFLCC planners recommended a force of 300,000 for the post-major combat operations phase or "Phase IV." Obviously, CFLCC was not resourced at that level. Equally important, the tasks of planning for Phase IV may well have been beyond either Central Command or CFLCC. While it is true that CFLCC had the burden, it does not follow necessarily that they should have had that burden. Planning, mounting and sustaining the campaign to topple Saddam Hussein legitimately assumed the lion's share





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of time available. This stemmed from the debate over how to get it done and how many troops would be required. Central Command also had OEF to manage. CFLCC had only one planning team to plan both the invasion and transition. Both headquarters were tired to the point of exhaustion before the invasion of Iraq and not well-situated to affect either the planning or execution of the inevitable transition.

A second planning team focused on transition would have made sense. That approach worked effectively in World War II and might have done so here, presuming the Secretary of Defense could have been convinced that more troops—let alone a second planning team—would prove necessary. Still, no one thought of it during 2002–03. Nor is Rumsfeld the only man who got it wrong.

Gen. John Keane, then the acting Chief of Staff of the Army, told Rumsfeld that he thought "we were going to be there … 8 to 10 years minimum with some measure of force," but noted in a 2006 interview that he "did not anticipate the emergence of an armed opposition in Iraq."

Wright and Col. Reese remain strong throughout their account of the various factors associated with the transition, including the short-lived Office of Reconstruction and Humanitarian Assistance (ORHA) and the Coalition Provisional Authority (CPA). They are particularly solid in discussion of the unseemly departure of both Central Command and CFLCC, which left Lt. Gen. Ricardo Sanchez holding the bag along with V Corps Headquarters. Although awarded the honorific of Combined Joint Task Force 7, V Corps had neither the resources nor a Joint staff to assume the vast task of waging counterinsurgency while developing the means to rebuild Iraq's decrepit infrastructure, made more so by Coalition bombs.

On Point II goes well beyond dealing with the command and control of the transition. The authors also address the Army rapidly adapting to conditions on the ground, reporting both good and bad news. Abu Ghraib in all of its ugliness is not avoided, nor do they ignore the bumps the Army and the Coalition encountered on the road to developing the means to train Iraqi security forces. At 696 pages, *On Point II* is compendious, to say the least. But the thematic approach enables the authors to deliver a lucid account that addresses everything from tactical innovation (on both sides) to activities designed to sustain troop welfare and morale.

On Point II does suffer from being unable to account fully for the "other side of the hill." The very good work done by Kevin Woods and coauthors in *The Iraqi Perspectives Report: Saddam's Senior Leadership on Operation Iraqi Freedom from the Official U.S. Joint Forces Command Report* bridges part of



that gap but is useful mostly in understanding what the Iraqi leadership thought in the months before the invasion and what they did that produced the conditions that later enabled the counterinsurgency. What the various insurgents and/or terrorists thought and are thinking remains unknown or classified; Wright and Col. Reese have done what they are able to do with what they know or can use.

On Point II contains a number of useful appendices amounting to 100 pages of information, including a timeline and an order of battles, all of which contribute to understanding the narrative and placing it in context. *On Point II* is richly documented and tantalizing in what it suggests for further study. More can be done—and hopefully will be done—on sustainment operations and rapid fielding, both of which merit discrete accounts. The Army, too, would be wise to undertake in detail a discussion of how it redesigned and, to a large extent, reorganized and reequipped itself for counterinsurgency operations. The implication of the transition of the reserve component from a strategic reserve, as traditionally envisioned, to an operational reserve also requires further study. The consequences of this transition have been far-reaching for the states and for reserve component soldiers. All of these areas and others, the authors have suggested, deserve further study.

The only disappointing chapter in the book is the one on implications. Wright and Col. Reese do not go as far as they might have in considering implications of what they learned for the Army in the future. They redeem themselves, however, in three sentences:

> The oft-stated goal of *regime change* implied some degree of postwar steps to build a new Iraqi Government in place of the Saddam regime. *Regime removal* might have been a more accurate description of the goal that the design of OIF was best suited to accomplish. The military means employed were sufficient to destroy the Saddam regime; they were not sufficient to replace it with the type of nation-state the United States wished to see in its place.

On Point II establishes the brand for the long-term effort Gen. Wallace intended. It is also clearly a point of departure for other work and will be widely quoted as authoritative, an honor the authors and the Contemporary Operations Study Team have earned. Finally, it keeps faith with the vision of Hugh Cole—the generation that fought in Iraq can read the tale of their effort.

COL. GREGORY FONTENOT, USA Ret., is the director of the University of Foreign Military and Cultural Studies at Fort Leavenworth, Kan. He is a coauthor of On Point: The U.S. Army in Operation Iraqi Freedom.

Military Must-Reads

By Col. Cole C. Kingseed
U.S. Army retired

In his *New York Times* best-selling memoir, *Beyond Band of Brothers,* Maj. Dick Winters states, "War brings out the worst and the best in people. Wars do not make men great, but they do bring out the greatness in good men." If your New Year's resolution is to learn more about military history and combat leadership, here are two areas and several books that might be of interest.

Civil War Must-Reads

Freeman, Douglas S., *Lee's Lieutenants,* 3 vols (New York: Charles Scribner's Sons, 1942–44)

Written by the foremost Southern historian, *Lee's Lieutenants* is a study in command of the principal leaders of the Army of Northern Virginia who fought under Gen. Robert E. Lee. Freeman describes the rise and fall of the early commanders and officers whose reputations were made or lost during the period of the great Confederate victories of 1862 and 1863. He concludes his study with the fortunes of Lee's commanders at Gettysburg through the eventual defeat of the Confederacy.

Grant, Ulysses S., *Personal Memoirs,* 2 vols (New York: Charles L. Webster and Company, 1885–86)

Often described as a classic in military literature, *Personal Memoirs* is Gen. U.S. Grant's own account of his military service. Mark Twain considered Grant's memoirs the best written memoirs since Caesar's *Commentaries.* If one wants to know why the North won the Civil War, he or she need only read these volumes.

McPherson, James M., *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988)

McPherson's Pulitzer Prize-winning study is the standard one-volume history of the Civil War by America's finest Civil War historian. McPherson provides fresh interpretations to the political, social and military events that shaped this nation's history from the outbreak of the war with Mexico to Gen. Robert E. Lee's surrender at Appomattox.

Sears, Stephen W., *Gettysburg* (Boston: Houghton Mifflin Company, 2003)

Written by a historian whom the *New York Times Book Review* called "arguably the preeminent living historian of the war's eastern theater," Sears' *Gettysburg* has replaced Edwin B. Coddington's *The Gettysburg Campaign: A Study in Command* as the definitive study of the war's greatest and most costly battle. Sears masterfully relates the campaign from its conceptual stage to Lincoln's delivery of the "Gettysburg Address."

Shaara, Michael, *The Killer Angels* (New York: Ballantine Books, 1974)

This Pulitzer Prize-winning novel chronicles the Battle of Gettysburg and the events leading to it through the eyes of the senior Confederate generals of the Army of Northern Virginia and the mid-level leaders of the Union Army of the Potomac. Shaara manages to capture the essence of war, leadership under fire and the human drama that characterized the Battle of Gettysburg.

World War II Must-Reads

Ambrose, Stephen E., *Band of Brothers: E Company, 506th Regiment, 101st Airborne from Normandy to Hitler's Eagle's Nest* (New York: Simon and Schuster, 1992)

Published on the 50th anniversary of World War II, *Band of Brothers* follows Easy Company, 506th Parachute Infantry Regiment, 101st Airborne Division, from basic training at Camp Toccoa, Ga., through D-Day, Operation Market-Garden, the Bulge and on to Hitler's Eagle's Nest at Berchtesgaden. Later the basis for the Emmy Award-winning HBO miniseries of the same title, *Band of Brothers* is a tribute to America's citizen-soldiers who waged World War II in the European theater.

Blumenson, Martin, *The Patton Papers, 1940–1945* (Boston: Houghton Mifflin Company, 1974)

Blending biography and autobiography, Blumenson reveals the full tapestry of a combat commander whom another biographer claimed was the most famous and controversial American soldier of the 20th century. As Gen. George S. Patton's official biographer, Blumenson chronicles his subject's extraordinary career in World War II in a masterpiece of superb editing and flowing narrative.

Linderman, Gerald F., *The World Within War* (New York: The Free Press, 1997)

Subtitled *America's Combat Experience in World War II, The World Within War* is social history at its best. As he did with his previous books on the Spanish-American War and the Civil War, Linderman introduces another amazing cast of characters who served on the front lines and who experienced extended combat. This study is an attempt to see the war through the eyes of those American combat soldiers—Army infantrymen and Marine riflemen—who fought in what Linderman calls the vanguard of military power.

Millett, Allan R. and Murray, Williamson, *A War To Be Won: Fighting the Second World War* (Cambridge, Mass.: The Belknap Press of Harvard University Press, 2000)

A compelling one-volume history of World War II, *A War To Be Won* concentrates on the conduct of operations by the military organizations that waged the war. At the heart of the narrative is the superb operational analysis of the military effectiveness of all belligerents by two of the war's foremost military historians.

Sledge, E.B., *With the Old Breed: At Peleliu and Okinawa* (Novato, Calif.: Presidio Press, 1981)

In his first-person account of the fighting at Peleliu and Okinawa through the eyes of a 20-year-old marine, Sledge captures the indelible mark combat leaves on its survivors. To Sledge, war is "brutish, inglorious and a terrible waste." If I would choose a single book to see war as it actually is, it would be this one.

Varied Fare

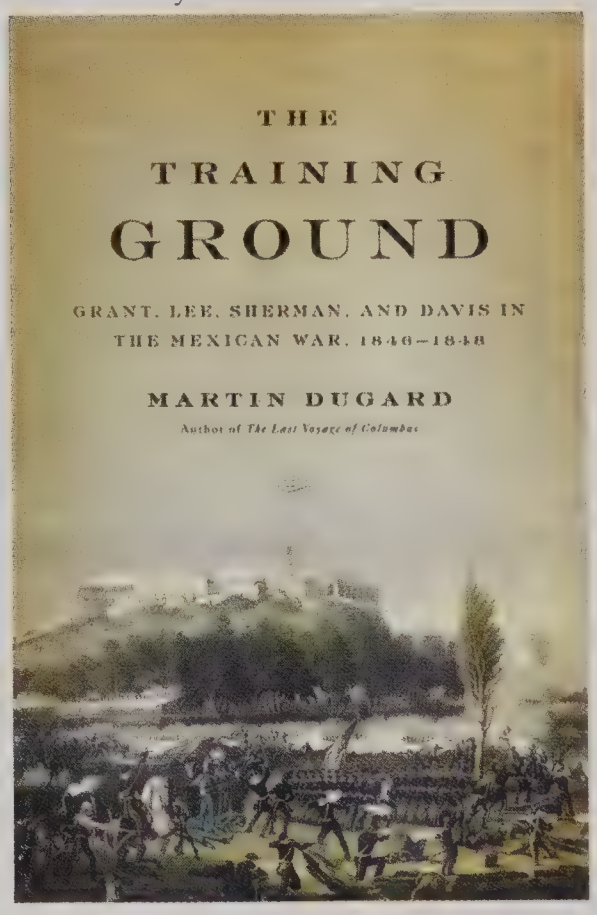
The Training Ground: Grant, Lee, Sherman, and Davis in the Mexican War, 1846–1848. *Martin Dugard. Little, Brown and Company. 464 pages; black-and-white photographs; maps; index; $29.99.*

"This is not a history of the Mexican War," Martin Dugard announces in the author's note of his new book, *The Training Ground*. Indeed, while thoroughly researched and augmented with liberal quotations from the memoirs of the men whose stories it relates, *The Training Ground* is truly an action-adventure narrative that barrels forward as it recounts the roles of several young West Point graduates—men like Ulysses (Sam) Grant, William Tecumseh Sherman, Jefferson Davis, Thomas (Stonewall) Jackson and Robert E. Lee—in the mid-19th century war with Mexico.

Written in a colloquial style without footnotes or endnotes (though Dugard provides a lengthy appendix of selected notes and biographies, as well as a 10-page selective bibliography), the tale of this extraordinary group of young officers who would later face each other across enemy lines is broken into tightly focused chapters, each of which addresses a single aspect of America's involvement in the Mexican War.

Organized around the chronology of the offensive, each chapter begins with a date before picking up the narrative strand of a particular soldier or unit, keeping the reader grounded in the midst of so many interwoven threads. In addition, maps accompany sections describing battles. *The Training Ground* also stays abreast of the Washington political developments that arise as the war progresses; sometimes the jump from Washington to Mexico and back is not the smoothest, but overall, Dugard's writing moves forward quickly and fluently.

The battle scenes, especially, sweep the reader into the action with clear, vivid descriptions augmented by frequent contributions from the soldiers themselves, via personal anecdotes and excerpts from letters home. The reader's sense of familiarity with the young officers serving as the main characters, whom Dugard sketches with detailed strokes, makes the events of the war all the more intense. When Grant grumbles at being appointed quartermaster (unaware that this shows his superiors' trust in him), the reader balks at the decision as well. When Gen. Winfield Scott calls on Lee—still a captain almost a decade and a half after graduating from West Point—to reconnoiter enemy territory, tension builds in the hope that Lee will finally prove himself worthy of advancement. While



the foreshadowing is heavy at times—especially at the ends of chapters, in the cliffhanger style of action novels—Dugard generally shows restraint; still, the substantial prologue and reliance on his audience's awareness of the future greatness of his subjects would suffice. (A short epilogue and Gen. George Meade's list of soldiers who fought in the Mexican War and also with distinction in the Civil War satisfy any lingering curiosity at the end of *The Training Ground*.)

One of the surprising elements of *The Training Ground* is the depiction of the untested Sam Grant as a moody youth unsure of his commitment to the military. Grant seems most preoccupied with his separation from his fiancée to whom he writes at the beginning of the war: "As soon as this is over, I will write to you again. That is, if I am one of the fortunate individuals who escape. You don't know how anxious I am to see you again, Julia." Dugard provides many excerpts from Grant's love letters—some impatient, some tender—that belie his later reputation as a hard-drinking, hard-fisted leader. The quotations pulled from Grant's memoirs are so eloquent that some readers will want to seek them out for further reading.

Also unexpected is the depth of the inclusion of the Mexicans' perspective of the war. Though the Mexican generals play second fiddle to their neighbors to the north in the course of history, Dugard fleshes out their personalities with equal care: When the Americans raise the Stars and Stripes at Chapultepec, Gen. Antonio López de Santa Anna cries, "If we were to plant our batteries in hell, the damned Yankees would take them from us," to which Gen. Pedro de Ampudia answers, "God is a Yankee."

There are numerous such moments that draw the reader in close. Trivia lovers will not be disappointed: Dugard seamlessly weaves many quirks into *The Training Ground*, from Gen. David E. Twiggs' strange digestive rituals before battle and the use of British mortars left behind from the Revolutionary War to the sobering aside that so many death marches were played for men who died from disease at Camargo that the mockingbirds there learned to mimic the refrain.

The tight-knit connections among so many of the soldiers, especially the West Point graduates, are revealed with a frequency that causes Dugard's message to resonate deeply. As the reader comes to understand how well these men knew each other and the great military skills they possessed, their alignment against each other in the Civil War is even more remarkable.

—Sara Hov

Bill Mauldin: A Life Up Front. *Todd DePastino. W.W. Norton & Company. 320 pages; black-and-white photographs and illustrations; index; $27.95.* **Willie & Joe: The WWII Years.** *Bill Mauldin. Fantagraphics Books. 600 pages; two-volume slipcased hardcover set; $65.*

At 5 feet, 10 inches tall and weighing barely 110 pounds, Bill Mauldin was an unlikely war hero, but he gave a voice to and buoyed the morale of frontline infantrymen as few could.

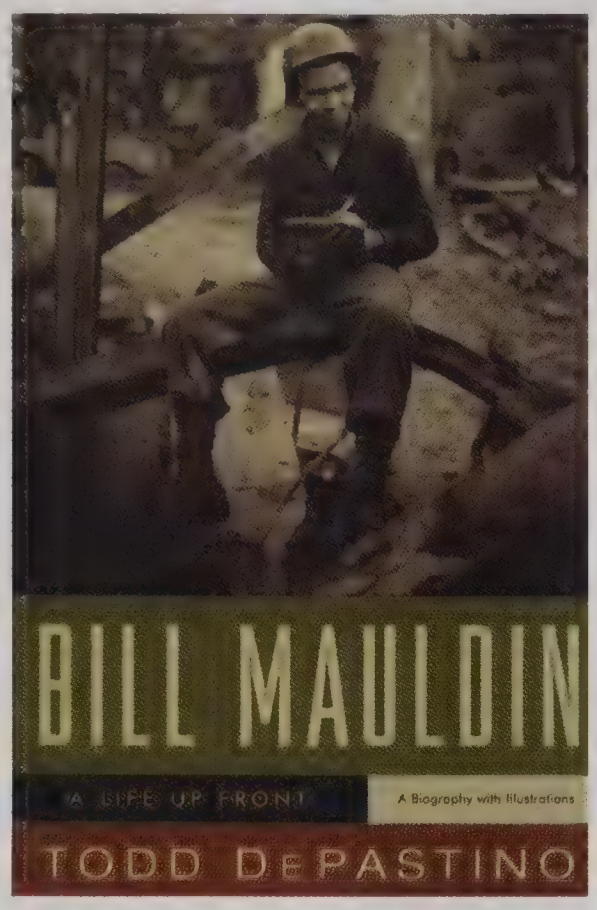
He was able to do in cartoons what Ernie Pyle did in prose, and even though Mauldin joined the National Guard in 1940 more out of desperation than anything else, by the time World War II ended, he was one of the most well-known and celebrated soldiers in the Army.

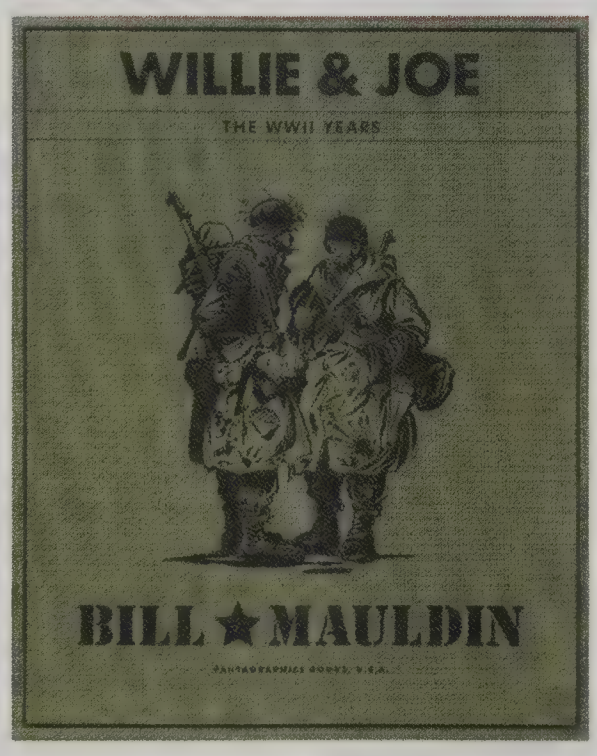
Nevertheless, it wasn't until this year that a biographer finally chose to chronicle Mauldin's illustrious and often turbulent life. In *Bill Mauldin: A Life Up Front*, historian Todd DePastino fills this gap in the story of World War II.

Until now, Mauldin's own autobiography and memoirs were the only accounts of his life.

Balanced, informative and interesting throughout, *A Life Up Front* is a quick read. DePastino is an excellent storyteller and manages to weave direct quotes and specific recollections into a sweeping narrative of the cartoonist's life.

DePastino gives a thorough retelling of Mauldin's childhood and years in the Army. Unfortunately, he doesn't pay the same level of attention to Mauldin's 60 years as a civilian after the war. This disparity is all the more pronounced since there are decades left untouched by Mauldin himself in his memoirs.





Despite this obvious oversight, the inclusion of dozens of Mauldin's cartoons highlight important moments in his life and career, as well as changes in his artistic style. The old adage "a picture is worth a thousand words" is certainly true in this case, and Mauldin's artwork is an excellent complement to DePastino's prose.

Worth mentioning is another DePastino project that will be of interest to any fan of Bill Mauldin or student of World War II: *Willie & Joe: The WWII Years.*

In addition to writing a biography of the cartoonist, DePastino served as editor of the most thorough compilation of Mauldin's cartoons yet published.

While focusing almost exclusively on the war years, he included in this collection of more than 600 cartoons many early works that have not been published in more than 60 years—and never to so large an audience. Of special interest are many early drafts and cartoon sketches that have never been published. This deluxe, two-volume set is an excellent supplement to the biography.

Like many of his generation, Mauldin was a child born of hardship in the Depression and came of age during the turmoil of World War II. And like so many others, he not only met these challenges but excelled.

DePastino's biography of Bill Mauldin does justice to a fascinating life story, and this compilation of his cartoons helps bring Mauldin's talent and his life at the front lines both to historians and a new generation.

—Samuel M. Baker



Historically Speaking

The Manhattan Project

By Brig. Gen. John S. Brown
U.S. Army retired

During the course of last year's presidential campaign, we heard much about achieving "energy independence," an imperative if we are to shed crippling geostrategic vulnerabilities, reverse staggering trade imbalances and dig out of the current economic sinkhole. Proposals incorporated further drilling and mining as well as improving economies and efficiencies. Most people recognize the limits of such incremental approaches. Some believe that "market forces" will solve the problem: When oil gets expensive enough, markets alone will propel us into a new energy paradigm. Unfortunately, the market itself is incremental, myopically so when managed by those seeking quarterly returns and pathologically so when led by those who trade stocks on a daily basis. Historically, true techno-economic breakthroughs have required significant government intervention to succeed.

An iconic example of a government-led techno-economic breakthrough is the harnessing of nuclear energy. For more than a generation, scientists had been musing about the potential energy available from nuclear fission or fusion. In 1939, Albert Einstein and Leo Szilard forwarded a letter to President Franklin D. Roosevelt advising him to pursue an atomic weapon in the belief that Nazi Germany was already doing so. For several years, interest, investment and activity spiraled upward but never achieved focus or coherence—or genuine results. In September 1942, the federal government handed the mission over to the U.S. Army in the person of soon-to-be Brig. Gen. Leslie Groves. Within a week, Gen. Groves purchased 52,000 acres at Oak Ridge, Tenn., to support a laboratory and production site. He had been advised that he needed an expansive isolated setting with ample electric power; familiar with the Tennessee Valley Authority and its setting, he found one. Within a month, Gen. Groves appointed physicist J. Robert Oppenheimer as the project's scientific director. Some found Oppenheimer's political views unnerving and his personality off-putting. Gen. Groves recognized Oppenheimer's genius and breadth of vision, and considered his political views irrelevant and his personality manageable.



U.S. Dept. of Energy

Then-Maj. Gen. Leslie R. Groves (left) confers with J. Robert Oppenheimer, the physicist he appointed scientific director of the Manhattan Project.

The Manhattan Project, named after the Manhattan Engineer District Gen. Groves ostensibly commanded, became massive. The War Production Board, according it the highest priority, spent more than $2 billion—a substantial sum at the time—and employed more than 130,000 people, including many of the world's finest engineers and physicists. The massive site at Oak Ridge produced uranium-235; an even more massive site near Richland, Wash., produced plutonium; and a sprawling complex at Los Alamos, N.M., housed laboratories and the facilities that actually assembled the weapons. A dozen other sites scattered around the United States provided other support and services. At one point, Oak Ridge alone consumed one-sixth of the electric power being generated in the United States. Despite the scope and scale of the effort, it progressed with creditable secrecy, a testament to the dedication and commitment of the agency and those who staffed it. Even the first man-made nuclear explosion at Alamogordo, N.M., in July 1945 was known but to a few.

The harnessing of nuclear power did not proceed in a straight line. There were dips and turns as scientists and engineers experimented with techniques and approaches. Gaseous diffusion, electromagnetic isotope separation, thermal diffusion, high-speed centrifuges and cyclotrons—all helped generate nuclear fuels with varying degrees of efficiency and effectiveness. In the end, the project produced two weapon types, not one. The bomb dropped on

Hiroshima was a gun-type uranium-235 device, whereas the one dropped on Nagasaki was an implosion-type plutonium-239 device.

Changes in the scope and direction of the program, at times radical, required decisive leadership as well as technical brilliance. The organizational skill of Gen. Groves and the scientific genius of Oppenheimer both were tested time and again. Ultimately, the vast project carried the United States and the world into the Atomic Age and through monumental change. When World War II concluded, the Atomic Energy Act of 1946 turned the entire project over to the U.S. Atomic Energy Commission, reflecting both traditional American military deference to civil authority and a desire to divert this newly harnessed power to peaceful purposes.

Initial oversight of a project of this scale by the Army Corps of Engineers was not unprecedented and quite sensible. The Army had the organizational skills, technical depth and nationwide footprint to pull it together. Its leaders were salaried civil servants with motivations other than profit. They could take the long view and accept that there would be perturbations en route. They would accept civilian control, maintain discipline and focus on the mission.



National Archives

Jumbo, an atomic device, is positioned for Trinity, the first man-made nuclear test, near Alamogordo, N.M., in July 1945.

From the beginning of our nation, the Army has been an instrument of national purpose, facilitating federally driven techno-economic advances. The opening of the West was federal policy enabled by such trailblazing Army explorers as Lewis and Clark and by the security umbrella the frontier Army produced. The railroads could not have succeeded without massive land grants and other subsidies. Many of their early managers and construction engineers were West Pointers on loan or recently retired. The automobile age similarly required huge governmental investments in roads and infrastructure to midwife it. The fingerprints of the Army Signal Corps were all over nascent radio and television, and visionary federal apportionment of the electromagnetic spectrum made industries based upon them possible. Aviation and rocketry both progressed from technological novelty to commercially feasible possibility under Army auspices, and farsighted federal programs spun them off into such new paradigms as contemporary air travel or satellite-based communications. Defense agencies and contractors developed both the computer and the Internet, and the federal government transmuted them from the military to the commercial sector.

At its best, the genius of our constitutional government has been to envision a better future and to undertake initiatives that lift us from one paradigm to another. The wisdom of our governance has been to turn economic working details over to private enterprise as soon as momentum is irreversibly achieved. Transcontinental railroads could not have been constructed, nuclear energy could not have been harnessed and the moon could not have been reached without federal leadership. Conversely, the federal government is not actually capable of "running" the new economies that result when techno-economic paradigm shifts are achieved.

I have heard it said that the challenges of energy independence are so daunting we will need another Manhattan Project to overcome them. If so, we would profit from the example, inspiration and lessons learned from the last one. ★

BRIG. GEN. JOHN S. BROWN, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University.

Recommended Reading:

Groves, Leslie R., *Now It Can Be Told: The Story of the Manhattan Project* (New York: Harper, 1962)

Jones, Vincent C., *Manhattan: The Army and the Atomic Bomb* (Washington, D.C.: U.S. Army Center of Military History, 1985)

Weigley, Russell F., *History of the United States Army* (New York: Macmillan Publishing Company, 1967)

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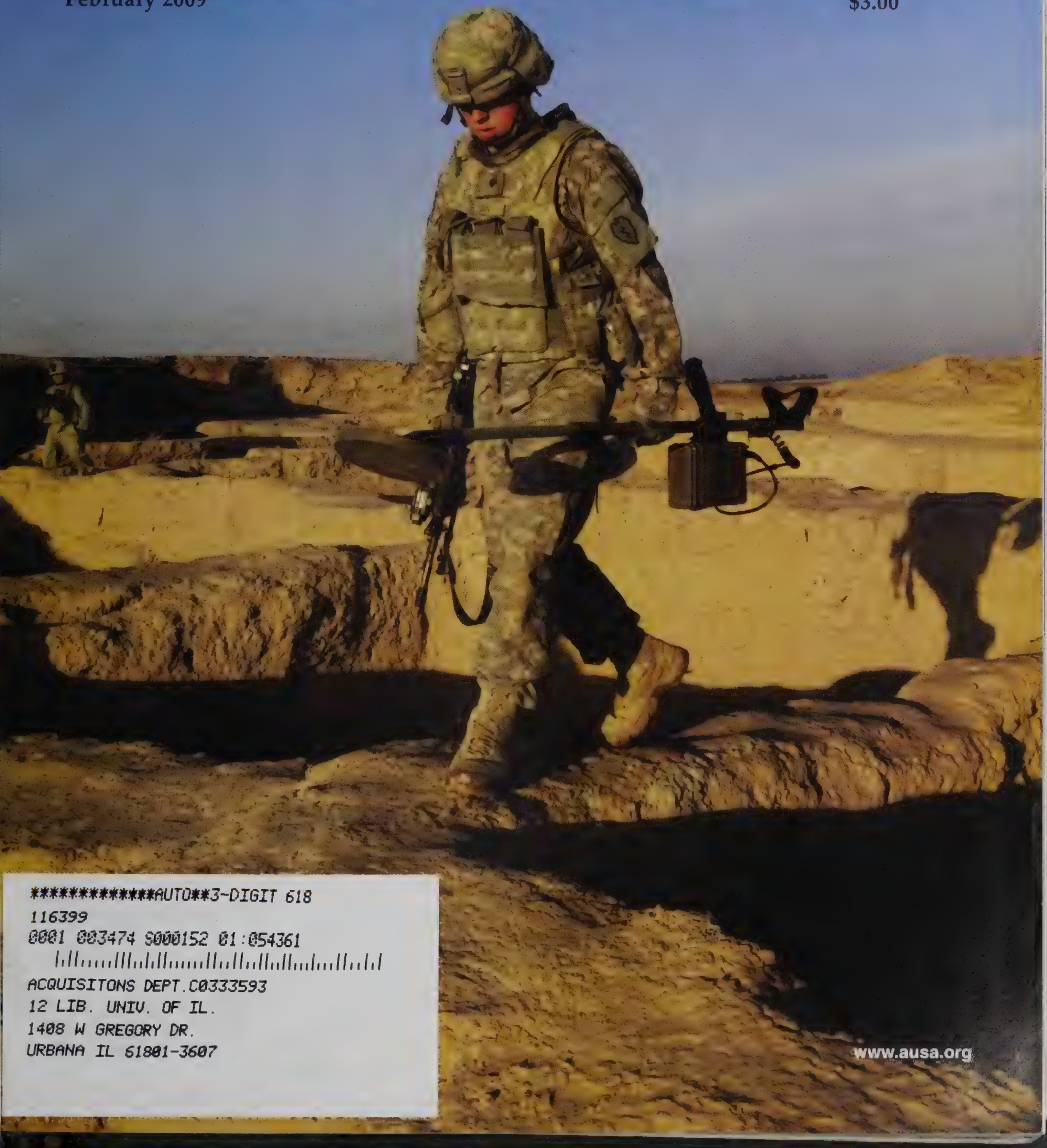
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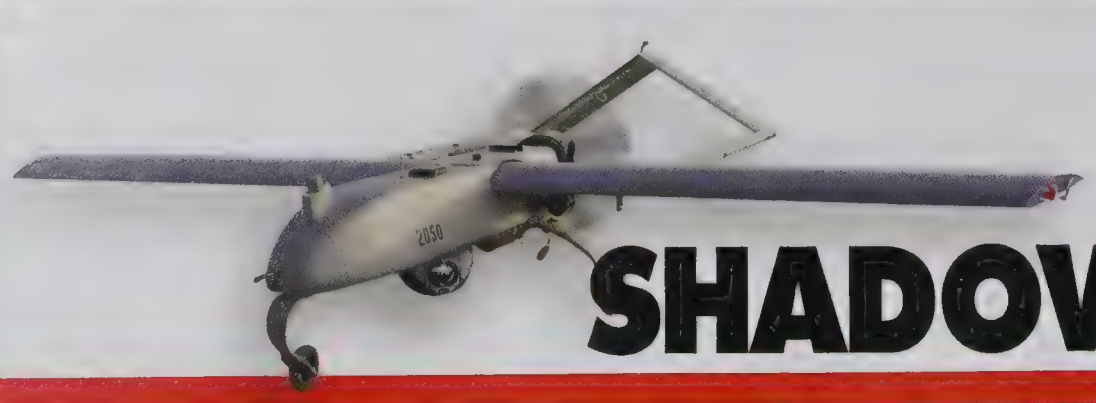
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Letters

Remembering Gen. Walter Kerwin



U.S. Army

Gen. Walter T. Kerwin Jr.

■ The passing of Gen. Walter T. Kerwin Jr. last July brought to mind afresh a memorable encounter that I had with him while I was a captain in the North Carolina Army National Guard (NCARNG). At the time, I was battery commander of Battery A, 1st Battalion, 113th Field Artillery. We were the direct support battalion for the 30th Mechanized Infantry Brigade, NCARNG.

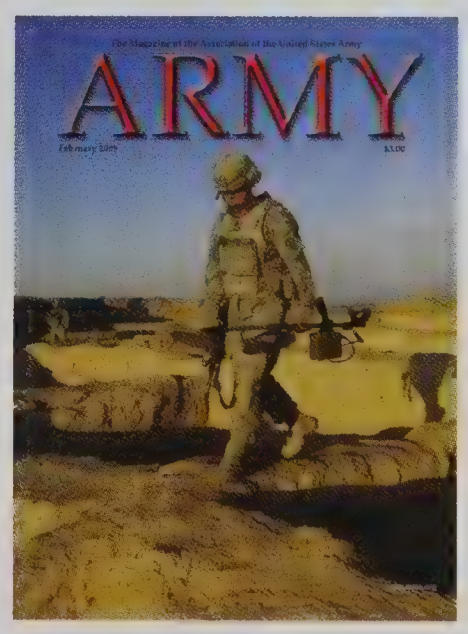
Contrary to the stereotype of "weekend warriors," during about half of our drill weekends, we would convoy from Charlotte, N.C., to Fort Bragg, N.C., to live fire on Saturdays. The advance party would depart home station on Friday to draw the weapons from the motor pool, and the remainder of the battalion would motor march to Fort Bragg very early on Saturday morning, fall in on the M109s and move to the field, usually registering to live fire by early afternoon. We would then fire on into the evening, secure the following morning, turn in and clean our tracks, and drive back to Charlotte—an arduous but rewarding drill.

One such Saturday in early 1974, I received word from the battalion that we were going to have a very high-ranking VIP visit my battery. The 30th Brigade at that time was a round-out augmentation brigade for the 82nd Airborne, so we were somewhat used to this. I had been in a nuclear weapons unit on active duty, so VIPs were no big deal.

Shortly thereafter, a staff car pulled into our area, and a four-star general, his aide, our battalion commander and the command sergeant major piled out. I was introduced to the U.S. Army Forces Command commander, Gen. Kerwin. Being visited by a four-star general did rather grab my attention, but I proceeded to brief him on my mission and the battery, and then answered the usual personal questions that he directed to me. After inquiring about the state of the battery and my soldiers, Gen. Kerwin asked me, "Captain, is there anything that you need?" Now I am sure that I was supposed to consider this a polite question and was expected to reply "No, sir," but as my associates to this day will attest, shyness has never been a problem of mine.

Instead, I said, "Yes, sir, there is; I cannot talk with my forward ob-

This Month's Cover



U.S. Army soldiers of the 1st Stryker Brigade Combat Team, 25th Infantry Division, patrol a section of Iraq's Diyala River Valley. *(Cover photograph by Petty Officer Walter J. Pels, U.S. Navy.)*

servers worth a darn. The radios we have are way out of date and a bunch of junk. We were supposed to get the new generation of equipment, but I understand those radios were all sent last year to Israel during the war, and we haven't gotten a thing." I thought my battalion commander was going to go into cardiac arrest on the spot, but Gen. Kerwin turned to the major who was his aide and said, "Make a note of that." I figured that would be the end of it.

A month later, our entire artillery battalion received a shipment of brand-new, state-of-the-art radios! About 25 years later, I had a chance to talk to Gen. Kerwin at a meeting and related that story, with my thanks. We had a hearty laugh together over it.

COL. J. A. BARTON CAMPBELL,
USAR RET.
Richmond, Va.

Honor Bright

■ I'd like to add to what Maj. Gen. Edward B. Atkeson, U.S. Army retired, wrote about *Honor Bright* in the November 2008 issue "Reviews" section. The book is masterful in many ways—I don't see how it could be better. It will be a long-lasting authority of unlimited benefit to readers far and beyond West Point and the Army, providing a look at how a small group can bring forth a code of honor that will endure. *Honor Bright* is a work of powerful, straightforward truth. The research is impeccable. I thought I knew the West Point motto, honor code and system pretty well, but I didn't know much at all—nothing about the good times, the bad times and all the links in between. We are much bigger now—the Academy and the nation—and we can hope there is still a place for honor in both.

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited for reasons of style, accuracy or space limitations. Letters should be typewritten and double-spaced. All letters must include the writer's full name, address and home telephone number. The volume of letters we receive makes individual acknowledgment impossible. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via e-mail to armymag@ausa.org.

The objective coverage in *Honor Bright* shows how the most important part of the West Point experience can get off track. As author Lewis Sorley demonstrates in the story of the honor code, there has to be education and the opportunity to develop a strong commitment to honor. There were times when we were consumed by other things. In his treatment of challenging problems, how we allowed them to happen and how we shouldered them and carried on, Sorley has found the essence of the honor story. At the same time, he shows how and why there are questions we must continue to answer. I think readers who have taken the honor code for granted—I, for one—will see how absolutely necessary it is to give it the proper place, proper support and proper understanding at any given time. It seems to me when I read *Honor Bright* that right now, we have to respect the need to keep the code in the hands of the cadets and give them the fullest support in their development, their growing leadership and their handoff to classes that follow. *Honor Bright* will serve well those leaders who want to see honor hold its proper role in personal development, not by any means just at West Point but other places as well.

GEN. JOHN R. GALVIN, USA RET.
U.S.M.A. '54
Jonesboro, Ga.



U.S. Military Academy

Newly commissioned second lieutenants of the Class of 2008 celebrate at the 210th graduation of the U.S. Military Academy.

Gen. Eric Shinseki

■ The appointment of Gen. Eric Shinseki, U.S. Army retired, as head of the Department of Veterans Affairs on December 7, 2008, highlights a remarkable turn of events. On a day remembered as a "day of infamy" in U.S. history due to the 1941 attack on Pearl Harbor, Hawaii, by the Empire of Japan, President-elect Obama chose to name this highly decorated veteran as the country's first Japanese-American head of the VA. Bravo! In testimonies before



U.S. Army

Gen. Eric K. Shinseki, U.S. Army retired

Congress, Gen. Shinseki emphasized the need to go into combat with more than adequate combat forces, supplies, infrastructure teams and more.

As Army Chief of Staff, Gen. Shinseki testified before the U.S. Senate Armed Services committee that "something on the order of several hundred thousand soldiers" would probably be required for postwar Iraq. This was a number far higher than that proposed by Secretary of Defense Donald Rumsfeld in his invasion plan, and it was rejected by both Rumsfeld and Deputy Secretary of Defense Paul Wolfowitz. Gen. Shinseki retired in 2003.

Over time, the opinion that Gen. Shinseki had it right has become almost universally held in U.S. political circles. In November 2006, in testimony before Congress, then-commander of U.S. Central Command Gen. John Abizaid said that Gen. Shinseki's estimate regarding troop levels had been correct.

It seems very appropriate that the man who had it right is now the right man to oversee our veterans. I'm not sure if it's fate, Providence or simply karma, but whatever it is, it's correct, and kudos go out to Gen. Shinseki as he continues to serve and honor our country.

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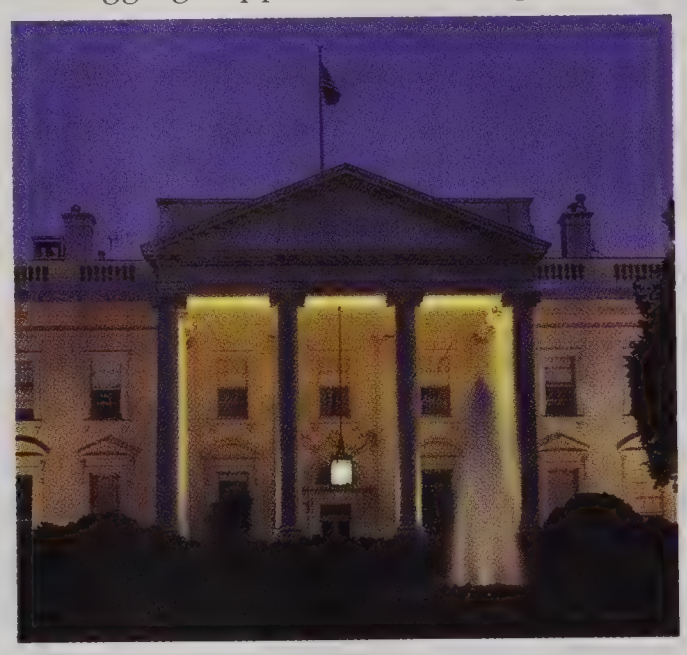


Washington Report

Divining New Directions

During the weeks leading up to the inauguration of President Barack H. Obama, the directions in which policy winds would blow in the new administration were hazy at the Pentagon and fogbound at headquarters, outposts and fighting positions around the world. What would the new administration do or not do, hurry up or slow down? As the inauguration drew near, most eyes remained focused on the political windsock, trying to detect the merest twitch that would telegraph shifts in the policy and budgetary breeze.

Much hand-wringing came down to money. Policies drive the Defense Department and services' budgets, and a budget request is the tab that an administration is willing to pay for its policies and priorities; in the case of the budget request, however, the check arrives when you get to the restaurant, not after dessert. Except for lagging supplementals, it's an ask-for-it-up-front deal.



Speculation was rampant that the new budget request will be delayed from its usual February schedule, pushed back as far as April. Meanwhile, many defense officials have long accepted that some big-ticket items—aircraft, ships, systems—will disappear from the budget entirely or be whittled down to paying only enough of the gas bill to keep the pilot light flickering.

It was clear, however, that the new administration's overall priority would be the economy; how much that might rake from the defense budget was not. Also clear was that Defense Secretary Robert M. Gates and some of his Pentagon team would stay aboard for an indeterminate period to smooth the transition. Meanwhile, key Defense Department nominees were announced. William J. Lynn III is the nominee for deputy defense secretary. Three others are intended to be nominated: Robert F. Hale as undersecretary of defense (comptroller); Michèle Flournoy as undersecretary of defense for policy; and Jeh Charles Johnson as general counsel. Army Secretary Pete Geren announced he would leave as soon as his replacement arrived, and Under Secretary of the Army Nelson M. Ford resigned in January.

In December and January, Secretary Gates intimated strongly that his budgetary priorities orbited around the hardware and technology that could be used most efficiently and effectively to fight today's fight, not the fight of decades and battlefields hence—ringing up strike two for big-ticket procurements, if not strike three, given that it's said the Secretary of Defense will have more power to directly frame procurement under the Obama administration.

Secretary Gates, in the weeks leading up to the inauguration, made the rounds—one foot in the old administration, one in the new—notably traveling to Afghanistan, where he said that an additional 20,000 U.S. troops would be in place by late spring, indicating support for such an increase from the incoming administration.

Secretary Gates also was in Europe in an attempt to inspire NATO allies to send more troops to Afghanistan, but the Afghanistan surge primarily will come from one NATO member: the United States. Most additional troops will go to southern Afghanistan, where Taliban forces leveraged a NATO-forces vacuum into a resurgence.

In Iraq, commanders attempted to assert their recommendations into the debate leading up to the administration changeover—markedly leaning toward "Don't pull out too many U.S. troops too soon." The commander of Multi-National Force-Iraq, Gen. Raymond T. Odierno, said he would make recommendations on 2009 troop withdrawals early this year.

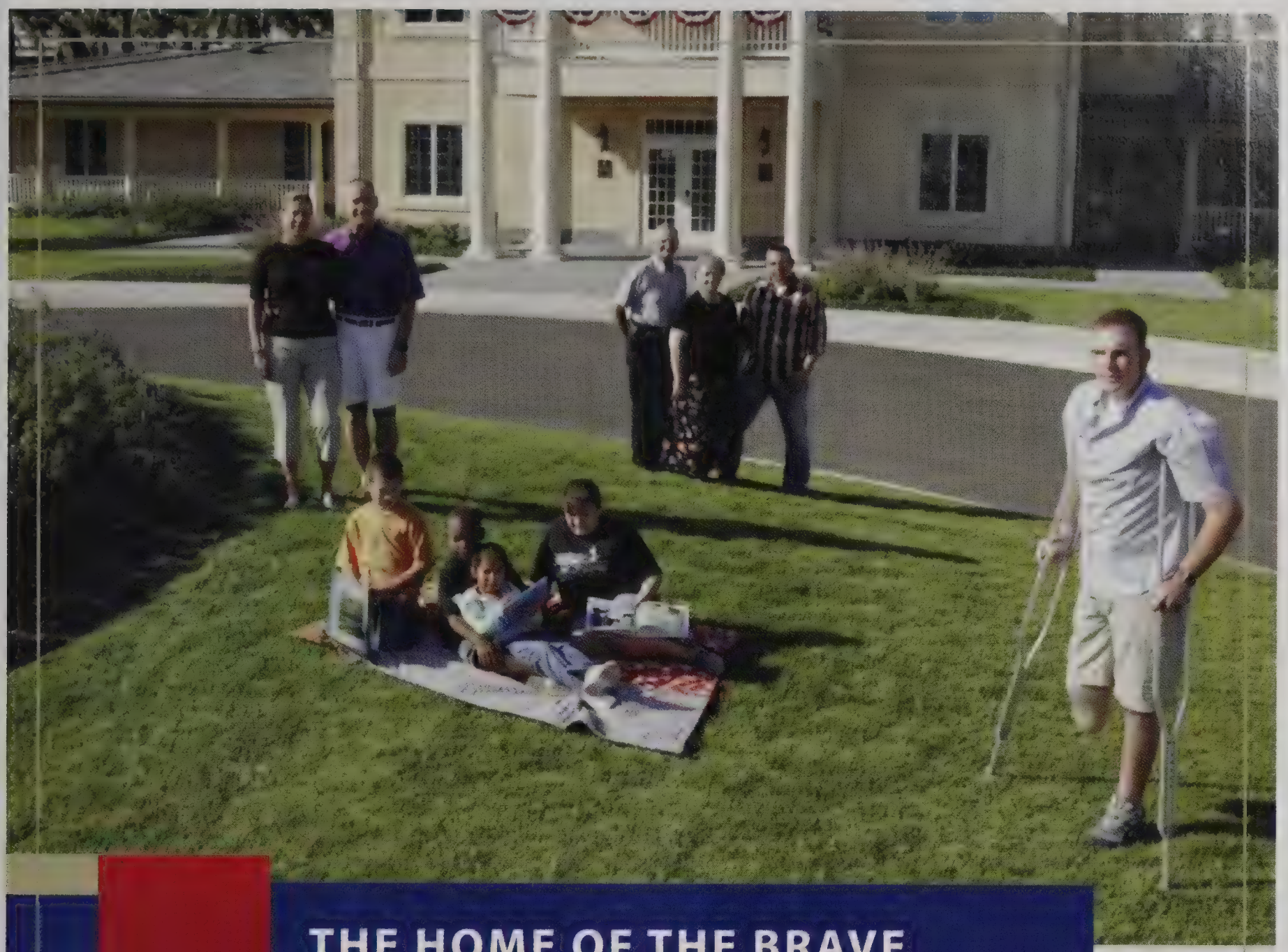
Former President George W. Bush signed a strategic agreement with Iraq before leaving office, setting the pullout date for U.S. forces at the end of 2011. President Obama (while campaigning) said he would have U.S. forces out of Iraq 16 months after taking office. His late postelection view, however, called for a "responsible" pullout timetable, which also awaited clarification.

Living History Exhibit Opens. The Army recently opened a 10,000-square-foot exhibit at the Pentagon that features more than 400 historical artifacts, some 80 pieces of original artwork and hundreds of photographs that tell the history of the American soldier since the Army was born on June 14, 1775.

Entitled "A Living History," the exhibit is intended to connect the artifacts to real people and offer a deeper understanding of the contributions of soldiers past and present in areas as diverse in time and place as Colonial Yorktown, Va., and the mountains of Afghanistan.

The exhibit contains the work of combat artists dating back to World War I, when the Army began placing artists in the field.

The exhibit uses information and artifacts from the Army Museum System and the Army History Program. More than 70 companies and individuals also provided materials and artifacts, filling 39 display cases.



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News Call

82nd CAB to Deploy to Afghanistan in Spring

The Department of Defense has announced that approximately 2,800 soldiers and the fleet of helicopters of the 82nd Combat Aviation Brigade (CAB), 82nd Airborne Division, Fort Bragg, N.C., will deploy to Afghanistan in late spring, several months earlier than planned. In January, Secretary of Defense Robert M. Gates approved the 12-month deployment at the request of commanders on the ground; it will increase the level of forces and military capability of the International Security Assistance Force.

Although battalions of the CAB have completed repeated deployments to Afghanistan and Iraq, this will be the first time since 1990 that the brigade has deployed in its entirety. The brigade has requested accelerated fielding of the F model of the CH-47 Chinook cargo helicopter, which features a modernized airframe, avionics and survivability. Brigade commander Col. Paul Bricker told the *Fayetteville* (N.C.) *Observer* that the F model can be successfully landed in conditions with no visibility and that "in Afghanistan, the dust is so intense that capability on that aircraft will be of great value to us." The CAB also flies Apache attack, Black Hawk multipurpose and Kiowa reconnaissance helicopters as well as the medevac version of the Black Hawk, essential for medical evacuation in Afghanistan.



U.S. Army/Sgt. Charles Brice

Army Sgt. Tobias Harris, Company A, 201st Brigade Support Battalion, demonstrates to Afghan security guards how to search a nonenemy combatant.

The 82nd CAB is currently assigned to U.S. Northern Command, headquartered in Colorado. Col. Bricker said that assignment will probably continue until the Army identifies a replacement unit. Some 3,500 paratroopers from the 82nd Airborne's 3rd Brigade Combat Team left Fort Bragg in November and December for a yearlong deployment to Iraq, and the 4th Brigade Combat Team and 1st Brigade Combat Team expect to deploy in mid-2009.

ARNG to Command in Iraq. An Army National Guard division headquarters will deploy to command active duty forces in combat for only the second time since 9/11. DoD has announced that the 34th Infantry Division headquarters, based in Rosemount, Minn., will deploy to Iraq in April. More than 1,000 soldiers of the division, known as the Red Bull, will mobilize for training this month for the yearlong deployment.

The unit will provide command and control, intelligence, surveillance and reconnaissance capabilities for more than 16,000 U.S. and other Coalition troops in the southern third of Iraq. The 34th Division headquarters will partner with and support more than 40,000 Iraqi soldiers and policemen across eight of the country's 18 provinces that have been returned to Iraqi control. The wide range of civilian experience of members of the division—business, agriculture, law, law enforcement, medicine and other city services—will prove vital to their mission. They will focus on working with embedded provincial reconstruction teams from the U.S. State Department to improve infrastructure, build essential services, and help local governments stimulate the economy and provide jobs.

The division's headquarters, special troops battalion, division band and 34th Military Police Company will train at Fort Lewis, Wash. The unit will relieve the 10th Mountain Division headquarters as Multi-National Division-Center.

New Training Manual. The Army recently released Field Manual (FM) 7-0 *Training for Full Spectrum Operations*, which challenges leaders to train for

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the full breadth and complexity of today's missions, including stability as well as offensive and defensive operations. The new manual, which replaces the 2002 edition of FM 7-0 *Training the Force*, reflects the Army's recognition that the operational environment has changed. FM 3-0 *Operations* and FM 3-07 *Stability Operations* were released in 2008.

The release of the new training manual marks the first time that the Army has synchronized the manuals for operations and training. FM 7-0 challenges leaders to keep sight of the Army's first priority—fighting and winning the nation's wars—as they train to fight in a full spectrum operations environment. Leaders must be able to conduct simultaneous offensive, defensive and stability or civil-support operations along the spectrum of conflict from outright war to stable peace.

According to Training and Doctrine Command officials, the principles and concepts of the new manual are intended to produce agile leaders who can adapt easily and rapidly to ambiguous and changing situations.

Lt. Gen. James D. Thurman, deputy chief of staff, G-3/5/7, told reporters at the Pentagon that the Army will release FM 7-1, an addendum to the new training manual, this spring. Titled *Battle Focused Training*, the manual will be web-based and will provide training lessons, examples of concepts presented in FM 7-0 and best practices for implementing those concepts.

AFRICOM Airlifts to Darfur. In one of his final acts in office, former President George W. Bush authorized U.S. Africa Command (AFRICOM) to airlift heavy equipment to Sudan to support African Union and U.N. peacekeepers involved in the conflict in the nation's Darfur region. AFRICOM will ship 240 containers of water tankers, fuel tank trucks, forklifts and other oversized cargo—about 75 tons in all—from Kigali, Rwanda, to Darfur aboard two C-17 Globemaster III aircraft. The mission will help protect civilian lives and deliver humanitarian aid to areas of western Darfur currently inaccessible due to security concerns.

The airlift operation would be the first large-scale peacekeeper-support mission for AFRICOM since it became fully operational in October 2008. AFRICOM plans to incorporate Africa Deployment Assistance Phased Training (ADAPT) into the airlift operation. The ADAPT initiative, first used last summer in transporting peacekeepers to Somalia from Uganda, aims to teach militaries the logistical skills required to deploy in support of peacekeeping missions. The U.S. military first transported troops and cargo in support of the mission in Darfur in 2004 and has provided peacekeeping training in Africa for more than a decade.



Fort Bliss Public Affairs

Year of the NCO. *Secretary of the Army Pete Geren, U.S. Congressman Silvestre Reyes (D-TX), Chief of Staff of the Army Gen. George W. Casey Jr. and Sergeant Major of the Army Kenneth O. Preston announce the Year of the Noncommissioned Officer during a January press conference at the Sergeants Major Academy, Fort Bliss, Texas.*

Policy Changes in Korea. The Pentagon plans to increase the number of accompanied tours in South Korea and to lengthen most of them from two to three years. Longer tours will improve regional security objectives, benefit training and reduce costs.

Accompanied tours in Seoul, Daegu, Pyeongtaek, Osan and Chinhae will extend from 24 months to 36 months, and command-sponsored slots will roughly double in the next year to 4,350. Uijongbu and Dongducheon, which do not currently offer standard accompanied tours and lack the level of U.S. services of the cities farther south, will begin offering 24-month tours in as many as 2,100 command-sponsored slots. Standard unaccompanied tour lengths will remain at 12 months for most troops and 24 months for key personnel.

The change is the culmination of a long campaign by U.S. commanders in Korea, and the first of the new tours could begin as early as this spring. Gen. Walter L. (Skip) Sharp, commander of U.S. Forces Korea, and senior theater service representatives will jointly determine the number of command sponsorship vacancies at each of the seven locations. Some 28,500 American servicemembers serve in Korea, 90 percent of whom now serve a yearlong unaccompanied tour.

U.S. officials plan to build enough infrastructure, schools and day care centers to accommodate servicemembers, expecting that at least 80 percent of those with families will opt for accompanied tours. Such tours have been limited; as of December, there were 2,135 command-sponsored families living in South Korea and another 1,909 noncommand-sponsored families living at their own expense.

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Ten Green Berets Earn Silver Stars. Ten soldiers from Operational Detachment Alpha 3336 of the 3rd Special Forces Group, Fort Bragg, N.C., were awarded Silver Stars for their heroism in fighting insurgents in Afghanistan. It was the largest number of such awards given to the elite troops for a single engagement since the Vietnam War.

On April 6, 2008, Capt. Kyle M. Walton led the 12-man unit and a few dozen Afghan commando counterparts on a mission to capture or kill several high-value targets at an insurgent stronghold in the mountains of the Shok Valley, north of the city of Jalalabad in eastern Afghanistan's Nuristan Province. No roads lead to the Shok Valley; the helicopter that took the team in could not land. Near daybreak, with temperatures in the low 30s, the men, most carrying 60 to 80 pounds of gear, jumped about 10 feet from the helicopter, some landing in the icy river.

Capt. Walton had wanted to fight down the mountain; instead, the men split into three maneuver units to climb a draw up to the village at 10,000 feet. Using agricultural terraces as switchbacks, they edged upwards, but the noise of the helicopters had alerted the insurgents, who attacked from all sides with sniper fire, machine guns and rocket-propelled grenades as the lead element neared the compound.

The unit called for close air support, and F-15s arrived. The insurgents, about 200 of them, were so well dug in that they continued firing. Capt. Walton and his men returned fire as bombs fell and heavy gunfire came from all around. The lead unit, with Capt. Walton, moved out onto a ledge against a cliff to try to protect the wounded. Trained sniper SSgt. Seth E. Howard and medic SSgt. Ronald J. Shurer fought their way up the mountain. Under cover of fire from the Afghan commandos, SSgt. Howard got into place with his sniper rifle and began to pick off the insurgents. Apache gunships strafed the enemy while F-15s dropped 2,000-pound bombs within 350 yards of the unit's position.

As their ammunition stores grew low and clouds moved in, the Green Berets knew they had to get out or take the chance of being stranded overnight in enemy territory, but the insurgents had their entry route covered. The only option was to climb down the cliff into the valley. MSgt. Scott Ford set up medevac operations and directed the less severely wounded to carry the critically injured. Clinging to rocks and branches, the group made its way down the mountain. Most of the men dropped the last 20 feet to the streambed.

The pilot of the first medevac helicopter, its rotors pounded by bullets, hovered only long enough for the in-flight medic to jump out; the second had to land in the icy stream, and it took two men to carry each casualty through the water. By the time the battle ended—six and a half hours after it began—the Special Forces detachment and Afghan commandos had sustained 15 wounded and two Afghans killed; they had eliminated some 150 insurgents.

Lt. Gen. John F. Mulholland, commander of the U.S. Army Special Operations Command, presented the Silver Stars to the Green Berets of Alpha 3336 at Fort Bragg.

The 3rd Special Forces Group awarded nine additional Silver Stars, two Bronze Stars, two Army Commendation Medals for Valor and four Purple Hearts for actions undertaken in Iraq and Afghanistan.

The following members of Operational Detachment Alpha 3336, 3rd Special Forces Group (Airborne), were awarded the Silver Star for actions in a battle in the Shok Valley of Afghanistan:

Capt. Kyle M. Walton, MSgt. Scott Ford, SSgt. Dillon Behr, SSgt. Seth E. Howard, SSgt. Luis Morales, SSgt. David J. Sanders, SSgt. Ronald J. Shurer, SSgt. John W. Walding, SSgt. Matthew O. Williams and Spc. Michael D. Carter.

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from December 1 to December 31, 2008. All names have been released through the Department of Defense; families have been notified.

Cpl. Charles P. Gaffney Jr., 42
Pvt. Colman J. Meadows III, 19
Capt. Robert J. Yllescas, 31

Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from December 1 to December 31, 2008. All names have been released through the Department of Defense; families have been notified.

SSgt. Jonathan W. Dean, 25
Spc. Tony J. Gonzales, 20
PFC Coleman W. Hinkefent, 19
Spc. Stephen M. Okray, 21
Maj. John P. Pryor, 42
SSgt. Solomon T. Sam, 31
Sgt. John J. Savage, 26
SSgt. Christopher G. Smith, 28
Spc. Stephen G. Zapasnik, 19

Changes to BCTs. Based on a review of the Army's modular brigade structure requested by the Army G-3 last August, Training and Doctrine Command (TRADOC) has proposed a number of changes to the 43 infantry brigade combat teams (BCTs), 25 heavy BCTs, seven Stryker BCTs and one armored cavalry regiment that make up the active and National Guard operational force. The review considered some 7,900 personnel requests submitted by BCT commanders and settled on roughly 5,100 personnel changes to the BCT structure. The changes involve moving personnel spaces—not soldiers—from one job to another.

Among other changes, the Army

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GENERAL OFFICER CHANGES*

Brigadier Generals: **R.B. Abrams** from Dep. CG, CAC-T, TRADOC, Fort Leavenworth, Kan., to CG, NTC and Fort Irwin, Fort Irwin, Calif.; **G.E. Couch**, USAR, from Cmdr. (TPU), 316th ESC, Coraopolis, Pa., to Dir., Ops. and Plans, TCJ-3 (IMA), USTRANSCOM, Scott AFB, Ill.; **D.J.H. Pittard** from CG, NTC and Fort Irwin to Dep. CoS, G-3/5/7, TRADOC, Fort Monroe, Va.

***CAC-T**—Combined Arms Center for Training; **ESC**—Expeditionary Sustainment Command; **IMA**—Individual Mobilization Augmentee; **NTC**—National Training Center; **TPU**—Troop Program Unit; **TRADOC**—U.S. Army Training and Doctrine Command; **USAR**—U.S. Army Reserve; **USTRANSCOM**—U.S. Transportation Command.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

wants to strengthen battalion staffs by cutting 380 captain spaces from larger brigade headquarters units. In most cases, battalion staffs have only one captain to manage operations; this move would ensure that each maneuver battalion has three battle captains to manage current operations. The review also recommends increasing the strength of mounted reconnaissance platoons in each BCT by adding six scouts to the 18–30 soldiers usually assigned.

Another proposal would remove more than 1,000 spaces from various jobs—such as cooks and maintenance specialists—within BCTs and add one military intelligence (MI) soldier to each company to supplement the five- or six-member intelligence support teams that work for the company commander. An MI soldier placed in each battalion headquarters would float among the companies as needed. TRADOC also recommended shifting 380 slots from inside BCTs in order to add five soldiers to every tactical unmanned aerial vehicle platoon.

Two changes to the BCTs would not come out of the unit structure. One is the shifting of 60 personnel spaces to create a signal company within the 3rd Armored Cavalry Regiment; the other is the creation of a four-person technical intelligence support team in each BCT to provide expertise on capturing enemy weapons and equipment.

2009 BAH Rates. New 2009 Basic Allowance for Housing (BAH) rates took effect on January 1. The average housing allowance increased by 6.9 percent. BAH increases for soldiers with dependents average $95 a month. For example, a typical junior enlisted member with dependents will receive a BAH of about $68 a month higher than last year, while a senior NCO with dependents will receive an increase of about $93.

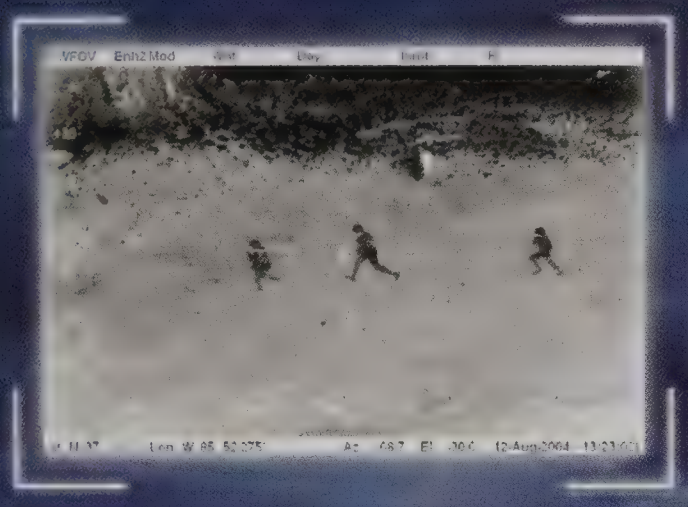
BAH rates are computed based on three components: median current market rent, average utilities and average renter's insurance. First, total housing costs are calculated for six housing profiles, based on the type of dwelling and number of bedrooms, in each military housing area. Then, the BAH rates are calculated for each pay grade for members with and without dependents.

In 2009, nearly 950,000 servicemembers will be paid an estimated total of $17.4 billion. Individual rates are protected in the BAH program. An individual soldier in a given location will never see a BAH rate decrease no matter what happens to housing costs there. If the area's housing costs decrease, for example, a soldier who has made long-term commitments by signing a lease or contract will not be penalized. For more information on BAH, visit http://perdiem.hqda.pentagon.mil/perdiem/bah.html. ★



U.S. Army/Benjamin Faske

***Soldier-Heroes Honored.** Soldier-heroes who received the Silver Star, Distinguished Flying Cross, Bronze Star or Purple Heart enter the Alamodome in San Antonio, Texas, in January before the start of the Army-sponsored All-American Bowl high school all-star football game. A total of 85 active duty, Army Reserve and National Guard soldiers represented Operations Iraqi Freedom or Enduring Freedom.*



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Rebuilding America's Eroding Defense Industrial Base

By Richard Hart Sinnreich

Recently a colleague sent me two important studies on a topic that has received too little scrutiny for too long: the post-Cold War erosion of America's formerly unequaled defense industrial base.

That isn't a problem calculated to prompt headlines, although its consequences occasionally do, when politicians complain of unacceptable delays in furnishing our troops critical equipment like mine-resistant vehicles or bemoan the escalating cost of aircraft, warships and other high-dollar weaponry.

But no recent news stories have pointed out that, during the past two decades, the nation's defense industrial base has radically contracted: that of our fifty-odd major defense contractors at the end of the 1980s, fewer than ten remain, that six shipbuilding yards today are owned and operated by only two firms, or that, increasingly, we can depend on only one manufacturer to produce modern combat aircraft.

Meanwhile, the cost of high-tech weaponry continues to rise together with our appetite for it. The old joke about a future Army with one tank, a Navy with one ship, and an Air Force with one plane no longer seems so funny.

A host of reasons can be cited to explain what has happened to the one-time "Arsenal of Democracy" since the demise of the Soviet Union, and most are perfectly understandable.

For starters, the U.S. economy itself has changed. While it remains the world's strongest, despite current financial and economic troubles, its character has altered dramatically, with services increasingly overtaking manufacturing and advanced technology development superseding old-fashioned but essential metal-bending.

Meanwhile, as labor costs have risen and industrial infrastructure has aged, more and more heavy industry has migrated overseas. In part because of that, domestic manufacturing increasingly has consolidated. Both the need for economies of scale and competitive pressures have tended to drive a greater share of manufacturing into the hands of fewer and larger firms.

Defense-related industry has suffered less from these changes than many other industrial sectors, but it couldn't be expected to evade them altogether. Moreover, the character of defense manufacturing also has changed. The days when American industry could shift en masse and relatively expeditiously from building cars, tractors, and civil aircraft to building jeeps, tanks, and fighters have long since disappeared.

One result is that, as almost always is the case, diminished competition has resulted in rising costs. Escalating defense costs certainly aren't totally attributable to industry consolidation, but the latter hasn't helped. Consolidation also has tended to increase the delay from requirement to procurement.

A more dangerous result from a security standpoint is that a smaller, more compact defense industrial sector is by that fact alone more vulnerable to accidental or intentional disruption. When a single firm is responsible for supplying virtually all of the military's air-to-air missiles, for example, it isn't hard to imagine the consequences of a natural or man-made shutdown.

Finally, and perhaps most troublesome from a strategic perspective, absent the reversal of current trends, doubts inevitably must mount about our material ability at any price to expand the nation's military capabilities rapidly in the unhappy event of a major war.

Few today foresee such a contest any time soon, and we all can hope that the prospect remains safely remote. As a former Army Chief of Staff once pointed out, however, hope is not a method. Great Britain's failure in the 1930s to enlarge her defense industrial base cost her people dearly at the outbreak of World War II, and very nearly cost them their liberty.

As the two studies I mentioned earlier confirm, some very bright folks in and out of the Defense Department have begun worrying about these problems, and have proposed a variety of solutions ranging from changing the pricing methods and incentive structure of defense procurement to strengthening DoD's acquisition workforce.

All agree, however, that the laissez-faire approach that largely has characterized government-industry relations during the past two decades needs to change, even at some cost in pure economic efficiency. If recent events have demonstrated that some financial institutions simply are too vital to the nation's economic health to be treated as Darwinian casualties, the same is true in spades of defense-critical industry.

Nothing we can do in the short term is likely to correct a problem that has been building for so long, and that is rooted so fundamentally in changes in the character of America's economy overall. Rebuilding a responsive, secure and expandable defense industrial base may require nearly as much time as it took for that base to erode in the first place.

But every journey begins with a single step, and this is one journey that we delay undertaking at our peril. □

RICHARD HART SINNREICH writes regularly for The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the November 30, 2008* Lawton Constitution *and is reprinted by permission of the author.*

No Holy Grails, No Silver Bullets

By Lt. Gen. James M. Dubik
U.S. Army retired

Since I've been back from Iraq (after a tour as commanding general of the Multi-National Security Transition Command-Iraq from June 2007 to July 2008), one of the questions I'm asked most often is: "What was the thing that made the surge work?" By "the thing," the questioner really means the one action or decision without which the results achieved in the past 18 months would not have been accomplished. In military language, the questioner is asking about "the decisive action." Personally, I don't think there was just one. Moreover, from my perspective, to search for the one thing is to search for a holy grail or a silver bullet. I do believe, however, that there are four categories of actions that, taken together over time, were decisive because they produced set conditions that increased the probability of accelerated improvement.

Intellectual clarity. Ambassador Ryan Crocker, Gen. David H. Petraeus and their primary military and political deputies understood the kind of war they were fighting and what strategy would likely result in "success" in that war. They also understood the complex and dynamic environment in which they would have to succeed. That environment had three parts, each of which was constantly shifting and affected the others: *A political dimension*—in the United States as well as in the capitals of the other Coalition nations—that provided the "space" that defined not only what was necessary but also what was practically possible; *a regional dimension*—each of Iraq's neighbors, on the immediate borders and beyond, affected what was happening in Iraq and therefore outlined the "Iraqi problem" in its broader sense; and *an Iraqi dimension*—the political, economic, cultural, religious and security aspects within Iraq that formed the immediate ground on which action would unfold and progress be made.

Unity of purpose. The Joint Campaign Plan, signed and published by Ambassador Crocker and Gen. Petreaus, translated their shared understanding into practical language. The process of developing the plan was itself important, for it facilitated a dialogue among the commanders and staffs of the immediate deputies and subordinate elements as well as many others outside the command. That dialogue provided a way to craft the plan's language and objectives, thus achieving a unity in the minds of those who would be responsible for implementing the plan or the support necessary for it.

Coherence of action. Plans don't win wars, actions do—a complex set of correctly aimed actions, continuously adapting to the situation on the ground. That complex set of actions also had the following three dimensions.

Tactical actions. The most visible tactical actions involved military forces—conventional and special operations, U.S. and Coalition, and, perhaps most importantly, Iraqi security forces, military and police. Ultimately, soldiers, sergeants, lieutenants and captains fight and win wars. Military forces are the most visible, but they are not the only tactical forces used. Equally important were the tactical forces of the provincial reconstruction teams, the advisers and trainers of the Iraqi security forces and those embedded in Iraqi security ministries and Joint headquarters, and the diplomatic and economic teams engaging throughout the Iraqi government and the region. The results of the daily actions of this complex set of tactical forces had to stay focused on achieving the objectives set in the Joint Campaign Plan. This kind of coherence can only be achieved by multiple teams of leaders working in tandem at every level of the military and diplomatic organization.

Strategic actions. The strategic dialogue among Coalition senior leaders, military and diplomatic, kept all informed as to the actual situation—good and bad, the resources that were necessary to sustain progress, as well as the risks and associated mitigating



"Doesn't a timeline for withdrawal give the advantage to the side without one?"

strategies—including adjustments to objectives or timelines needed to cover the gap between "required" versus "available" resources. This strategic dialogue resulted in continually updated guidance to Ambassador Crocker, Gen. Petraeus, and their primary military and political deputies.

Operational actions. The strategic dialogue and its resulting guidance was necessary for senior military and diplomatic leaders in Iraq to keep ends and means in proper balance. The "means" in this case were the variety of tactical forces (military and nonmilitary), the actions they had to accomplish and the resources that were available. The "ends" were the operational objectives and associated timelines. Both ends and means shifted constantly. This is natural in war. Successes often expand what is achievable and accelerate when it can be accomplished; setbacks have the opposite effect. Enemy action may open opportunities or require unplanned reaction and counteraction. Resources—whether personnel, equipment or finance—grow and diminish based on a variety of conditions. Political will, vital to the conduct of war, ebbs and flows. The operational-level leaders in Iraq contributed to unity of effort and coherence of action by constantly balancing and rebalancing ends and means.

Iraqi development. The Maliki government's action was significant. First, the government of Iraq has made progress in the political, diplomatic and economic areas. The Iraqi political leaders have made accommodations, passed legislation and taken action that has been both difficult and complex. Iraqi reconstruction spending has increased dramatically, and foreign investment has begun to show some life. Second, the Iraqis conducted their own surge by both growing their military and police forces by more than 125,000 over the past 18 months and improving those forces' overall reliability and quality. They used, and are using, those military and police forces in a series of semi-independent operations in Basrah, Mosul, Sadr City, Amarah and elsewhere, taking on the full range of enemies—from al Qaeda to special groups to organized crime.

The Maliki government, albeit slowly and cautiously, incorporated former insurgents into its security forces in very large numbers and is now coming to grips with what to do with the larger Sons of Iraq program. None of this has been easy, none of this has been perfect, and much hard political and economic work is still left undone. But without a doubt, Prime Minister Maliki and other key Iraqi political leaders made major contributions to the improved security situation.

Intellectual clarity, unity of purpose, coherence of action and Iraqi development together form a framework that helps one understand that no *one* thing made the surge work. Two other principles, however, amplify that understanding: the principle of sufficiency and the principle of relational dynamism.

The principle of sufficiency reminds us that nothing is perfect in war. An ambassador, a commander or their

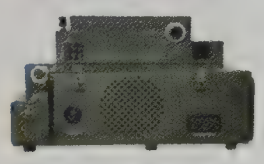
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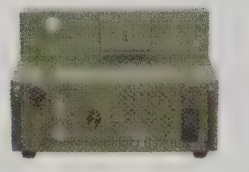
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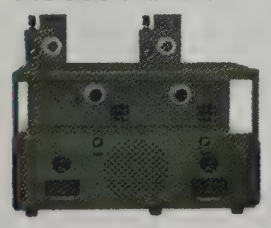
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deputies should not wait for perfect intelligence—it doesn't exist. Neither should they insist on being perfectly resourced—one never is. In the same way, no military leader or diplomat will ever achieve perfect understanding of the environment or ever produce perfect unity of effort and coherence of action. "Good enough to decide or act" is this principle's admonition—neither too much nor too little. War demands that leaders, military and diplomatic, create sufficient understanding, sufficient unity and sufficient coherence, then decide and act under those conditions of uncertainty.

The principle of relational dynamism reminds military commanders, diplomats and other political leaders that war is not a static endeavor. Quite the opposite. Plans are necessary starting points. To retain their utility, however, they need constant adjusting because the strategic and tactical realities of war change. A preconceived, firm and fixed solution cannot apply to a constantly changing phenomenon. War is a realm of chance and ambiguity, and no amount of technology will change it. One never really knows what the enemy will do, how politics or economics at home or in one of the Coalition capitals will affect resources or operations, or how weather or mood may alter an outcome. "Be practical and flexible" is this principle's admonition. War demands leaders, military and diplomatic, who are driven by what is actually possible and who are willing and able to adapt quickly.

The principles of sufficiency and relational dynamism are constant reminders that war's conduct is always going to be part science and part art.

In a novel or a movie, taking out the head of a cartel or mob organization or a tribal chief makes a great climax, clearly executed by the hero and easily understood by the audience. In this regard, however, life rarely imitates art. War is never simple, short or easy—few are the wars won by one decisive decision or action. A single battle may lend itself to such decisiveness, perhaps even a campaign—not likely, however, for a war. Success in war results from sets of decisions and actions taken over time by a variety of leaders. In war, there is no holy grail, and there is no silver bullet. □

LT. GEN. JAMES M. DUBIK, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.

Leadership Versus Information Technology Management—Where Do We Go From Here?

By Lt. Col. Joseph Doty
and
Maj. T.J. O'Connor

As our Army, by necessity, becomes more technologically savvy and dependent, we must keep an eye on the fact that ultimately the Army is a people profession (as opposed to a business or a bureaucracy) that requires authentic ethical leaders to lead our soldiers. We introduce this cautionary dialogue because our Army is "building the airplane while we are flying it"—engaged in persistent conflict in which ethical leadership is paramount for success while introducing and using more sophisticated technology.

State-of-the-art technology is an enormous force multiplier and will be one of many keys to our success as we fight these complex wars. As we look to the future of our Army, however, we need to be careful not to lose focus on growing and developing strong moral/ethical leaders who know how to develop leadership in their units. This is centered on a fundamental understanding of human development.

Just as when America launched its industrial prowess and intellectual capability during World War II, we are now investing in research and testing, and using some of the most sophisticated (and often classified) technologies in history. These capabilities include intelligence gathering, communications, and lethal and nonlethal weaponry. Because our adversaries are certainly racing against us to gain an advantage in these areas or to counter our capabilities, we need to continue to press forward to maximize our potential. We need to caution ourselves, however, against growing, developing and rewarding leaders who are only comfortable in front of plasma screens, managing volumes of data.

Technological superiority often gives warfighters (and policymakers) a false or inflated sense of superiority. Technology alone does not guarantee success. There are numerous examples of this, such as operations in Somalia (1993) and Operation Iraqi Freedom (OIF) in 2003. According to a November 2004 article in *Technology Review*, in Iraq "some units outran the range of high-bandwidth communications relays. Downloads took hours. Software locked up. … [Some ground units] found the enemy by running into them, much as forces have done since the beginning of warfare."

Another example, from a conversation that occurred during OIF 1:

> "If GCCS [Global Command and Control System] goes down, I'm screwed."
> "Why didn't they give you a radio?"
> "Because they gave me GCCS."

This conversation illustrates a leadership failure, not a technological failure.

What about map reading? Do soldiers and leaders need to be able to read maps? Field Manual 6-22 *Army Leadership* states that we have a "decreased emphasis on manual land navigation skills in training, thus rendering forces more vulnerable if the technology fails or is wrongly programmed." Again, failing to ensure that our soldiers are proper-

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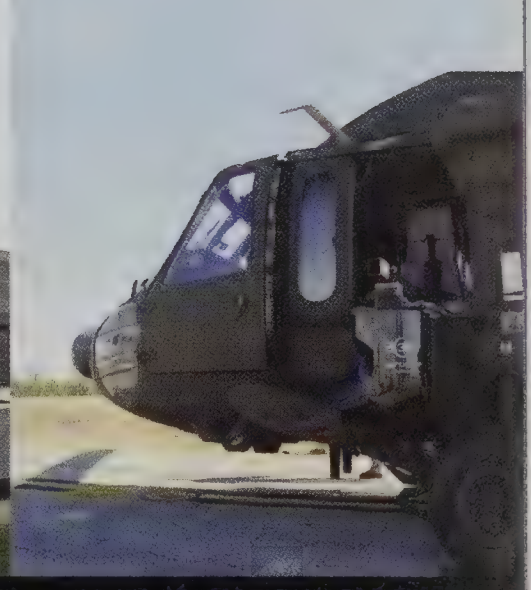
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ly trained is a failure of leadership, not technology.

Arguably, our Army is growing leaders and already has some who are too focused on numbers, metrics and electrons—that is what competent staffs are for. Staffs need to gather and collate intelligence and data, summarize it, and present it to commanders and leaders who will then synthesize it and make command decisions. Commanders need to be out with soldiers—leading, advising, gaining situational awareness, setting the example and commanding. The "boots on the ground" nature of our current conflicts requires that senior leaders be constantly out with our young soldiers and leaders. We need to be careful not to foster a generation gap between soldiers and leaders who have *fought* the dirty fight with others who have *managed* the dirty fight. This may be an uncomfortable topic for some to discuss, but that is OK—let the discussion begin.

In recent interviews, former brigade commanders (who commanded in Iraq or Afghanistan) cautioned against senior leaders getting stuck and comfortable in their forward operating bases (FOBs) and tactical operations centers (TOCs), managing the fight and/or preparing for the next briefing or battle update briefing. Some of their comments:

■ "We are developing a big cultural gap between those who have *fought* and those who have *managed*. ... The warfighters versus the war managers."

■ "Battlefield circulation is key (vice sitting in the TOC/FOB)."

■ "Young soldiers and officers are not seeing and connecting with senior leaders."

These observations by senior leaders, some of whom are now general officers, highlight the need for our Army to stay focused on the human dimension of leadership and warfare.

Another topic that surfaces in this technology discussion is "leadership by e-mail." If leading and leadership are human endeavors, should leaders lead via e-mail? Notwithstanding the obvious necessity to use e-mail over long distances, it can become a crutch, "the easy way out." For example, is it appropriate to reprimand a subordinate via e-mail? Should a leader praise a subordinate via e-mail or in public? The number of stories circulating in our Army from young leaders who talk negatively about their leaders and commanders leading via e-mail is not good—it should be of concern to the leadership of our Army.

Finally, we need to be cognizant of how skilled managers of technology can and will affect our personnel system, specifically in terms of promotions and assignments. For example, we are now promoting officers (some even below the zone) to field-grade rank who have never commanded at the company level. This would have been unheard of 15 years ago and points to the state of flux our Army has been in since Operations Enduring Freedom and Iraqi Freedom began. We are not saying anything is wrong with this, but as an Army, we need to acknowledge it is happening and analyze it from a personnel and officer professional-development standpoint.

Leadership, at its core, remains a human-to-human endeavor, and the Army remains a people-centered profession. Leadership involves personal connections with seniors, subordinates and peers, and it is central to building trust, confidence, loyalty, a sense of duty and winning teams.

We cannot lose sight of this. □

LT. COL. JOSEPH DOTY is the deputy director of the Army's Center of Excellence for the Professional Military Ethic (ACPME). He previously commanded 1st Battalion, 27th Field Artillery, in V Corps Artillery. MAJ. T.J. O'CONNOR conducts research for ACPME. He previously served as a signal center director with the 7th Special Forces Group in Afghanistan. The views expressed here are those of the authors and do not purport to reflect the position of the U.S. Military Academy, the Department of the Army or the Department of Defense.

The Shortage of Army Officers in Year Groups 1991-97

By Maj. George B. Brown III

"When written in Chinese, the word *crisis* is composed of two characters—one represents danger and one represents opportunity."
—John F. Kennedy, April 1959

As our nation continues to fight over an extended period of time and attempts to expand the size of its Army, there will be manpower issues. Consequently, the overall security of our nation depends on senior military and civilian leadership recognizing these issues before they reach proportions beyond what can be fixed quickly. Indeed, it is likely that the Army has already reached this point in at least a few of the branches.

The retirement rate of officers reaching 20 years of service last year was 20 percent; a recent survey indicates the rate could grow to 60 percent. As I began my research, I was only looking for options that could convince some of the 20 percent of officers that the U.S. Army historically loses to retirement each year to stay in three extra years. My biggest revelation is that that number may soon climb to 60 percent. This is staggering.

The officers in year groups 1991–97 (those officers who entered the Army during the military drawdown of the 1990s) have watched the more junior officers get picked up early for promotions and receive bonuses while their own year groups experience a real shortage (by more than threefold). These officers in year groups 1991–97 are quickly approaching retirement, especially with more than 36 percent of them prior-service. No one is even asking them to stay in longer. In fact, the only correspondence these officers will get from the U.S. Army is an automated e-mail from the Army

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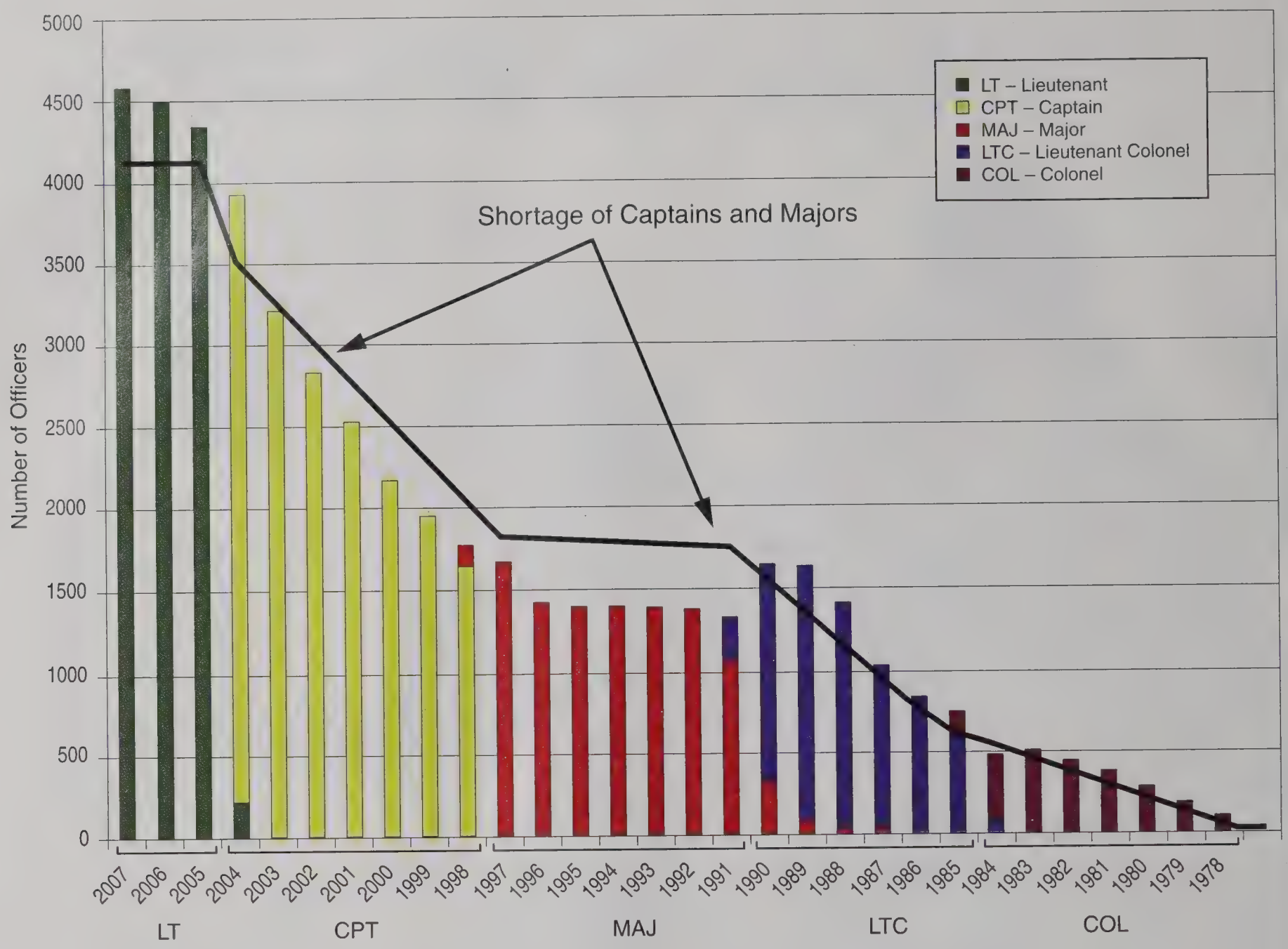
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Source: Department of the Army

Career and Alumni Program to offer assistance in leaving the service.

These officers are not disenfranchised, but they are exhausted. Their families ask them to retire because even when they are not deployed, the unpredictable and extended work hours at home station take their toll. Why wouldn't any able officer accept the generous retirement pay at 20 years and find a more stable job?

The loss rate suggests that by 2014, the U.S. Army could be short 30 percent of lieutenant colonels and 20 percent of majors. The most critical aspect of these potential shortages is that they will not be equally distributed across all the branches. Indications suggest that by 2014 many of the U.S. Army officer branches will face shortages greater than 50 percent of their requirement for lieutenant colonels and majors.

There are three critical points that influence the overall quantity of military officers: recruiting new officers, retaining mid-grade officers and limiting the number of officers retiring.

There are several initiatives the U.S. Army could use to correct the current problems. They include conducting an information campaign (short term), formalizing incentive programs already in use (near term) and creating a targeted monetary bonus program similar to those used for enlisted soldiers (long term).

Information campaign. Initially, officers with 18 years of service should receive a message from the U.S. Army explaining the benefits of staying in the service. With so much information being sent to the officers supporting them in retiring from the service and offering them jobs, there must be information from the U.S. Army to encourage officers to make better, more educated decisions. Senior Army leadership should reach out to officers approaching 18 years of service (or sooner) and take part in the edification process. Addressing the majors at the Command and General Staff College would be an example of a quality forum where this process could begin.

Incentive programs. The Human Resources Command (HRC) has many informal incentive programs that could be better utilized if publicized and controlled by one centralized section. One example would be allowing officers to change branch-immaterial assignments across branches. These options would not cost the Army, but they would require additional HRC staff dedicated to running this program. The system today requires officers to haggle with HRC for assignments. Although this is a method for HRC to target officers, it is

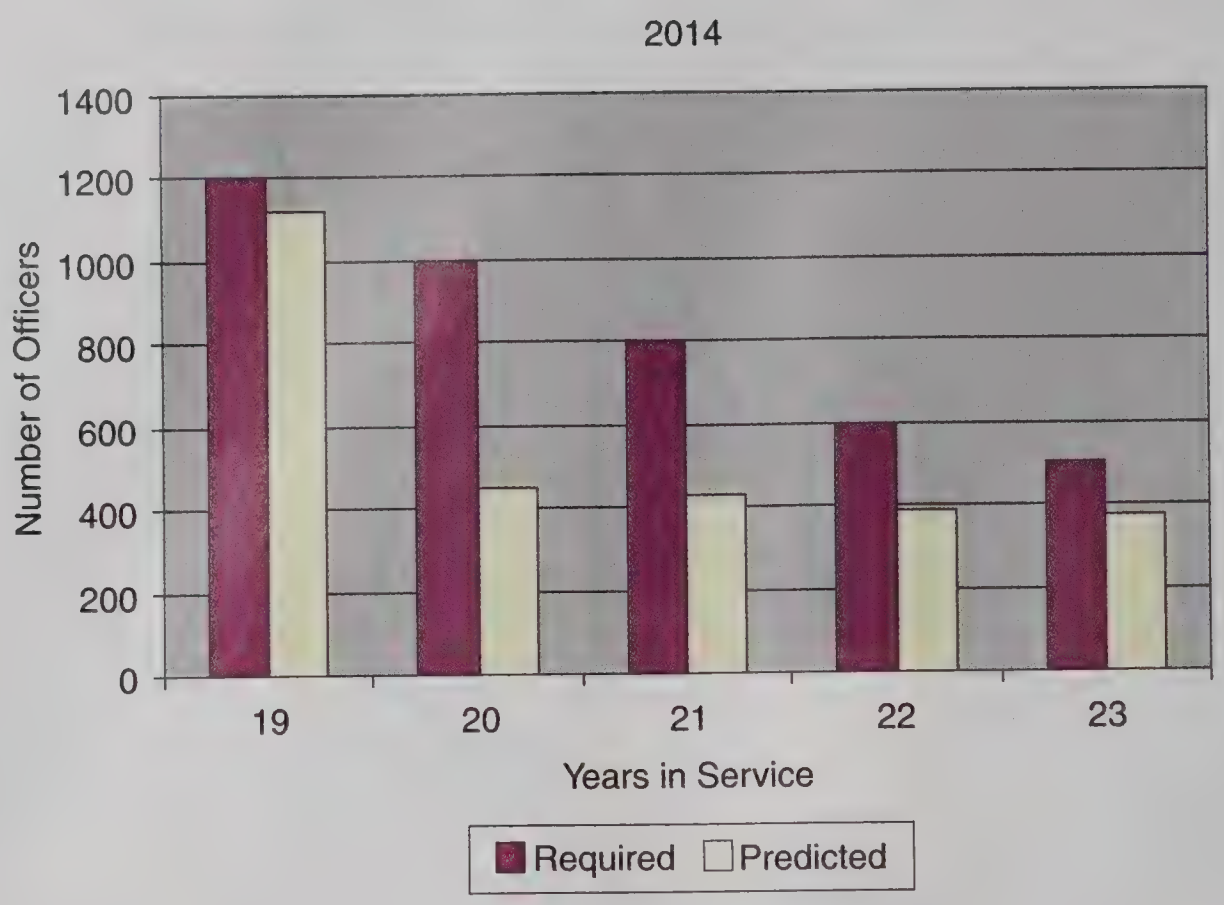


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not a centralized process allowing all officers fair and equal consideration. This is not much different from the competition among officers for certain schools and promotions.

Monetary bonus program. The one-year base pay bonus for three years of service after 20 years is one option to provide a monetary incentive to officers in branches that are critically short. This bonus program is already common practice with enlisted soldiers, and one-year base pay is a common bonus for enlisted soldiers in critical jobs. An average of 1,400 officers reach 20 years of service each year. At 20 years of service, most officers would be at the rank of lieutenant colonel with a base pay of $88,473.60 a year. The bonus program would equal a yearly maximum cost of just under $124 million, even if every officer were given this bonus after reaching 20 years of service; the cost of the captain retention program would be almost three times this amount. The cost of this program would be much less if only the officers in the shortage branches who are eligible for retirement were targeted. Another way to think about the cost of this plan is to recognize that the Army is short approximately 15 percent of its authorized strength of majors and 8.5 percent of lieutenant colonels.

This means that part of the budget set aside to pay these officers' salaries is not being used. In theory (and practice) 85 majors are working harder to do the job of 100 majors and not receiving any extra pay.

These issues and recommendations are not rocket science. This report is like the invention of the paper clip; anyone can say "I knew that" after the fact. Some might say there is no issue, but most of the officers in the trenches can see the situation quite clearly. The first step in dealing with this issue is for those in positions to act to recognize that there is a problem.

It is obvious that the situation is bad and growing substantially worse. More senior-level discussions on this topic are required, and swift action is necessary. The longer the Army waits to seize the opportunity for action, the fewer options and assets the Army will have time to implement. The state of affairs of the U.S. Army and the defense of America are at risk. □

MAJ. GEORGE B. BROWN III entered the Army in 1990 and became an NCO in 1992 and a commissioned officer in 1995. His deployments include Operation Desert Shield/Storm in Kuwait/Saudi Arabia/Iraq, Operation Provide Comfort in Iraq, Stabilization Force in Bosnia-Herzegovina/Hungary and Operation Iraqi Freedom. He has also spent nine years stationed in Europe. He holds a master's degree from Webster University and is currently a graduate student in the U.S. Army Command and General Staff College at Fort Leavenworth, Kan. He can be reached at Brown-George@US.Army.mil. This article is a summary of Maj. Brown's MMAS CGSC thesis titled A Pending Major Crisis: An Analysis of the Critical Shortage of U.S. Army Officers in Year Groups 1991–1997.



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OPERATIONALIZING FM 3-07 *Stability Operations* IN U.S. AFRICA COMMAND

By Gen. William E. (Kip) Ward

In the course of contributing to the development of the new Army field manual, FM 3-07 *Stability Operations,* I was convinced that I was reading a copy of the strategy for U.S. Africa Command. While it was written with "Phase Four" Iraq and Afghanistan in mind, everything in the manual—from its description of the Army's strategic approach in the first chapter through the functions and interface with Joint, interagency, intergovernmental and multinational organizations in the appendices—has much broader applicability, especially in the "Phase Zero" environment in which geographic combatant commands (GCCs) such as U.S. Africa Command continuously operate. Never before has our doctrine illustrated what I have believed all along—that approaches to Phase Zero and

stability operations are similar. The capabilities required and approaches taken by the Army as expressed in chapters three through six are nearly identical to those needed to carry out Phase Zero operations in support of our partners during peacetime, regardless of whether those partners are highly developed and stable or less developed and emerging.

Recognizing this overlap is crucial as we look beyond our current operations and pursue breaking the cycle of "persistent conflict." As FM 3-07 states—and many senior leaders



Maj. David Panzera, U.S. Embassy, South Africa

Col. Martha McSally, U.S. Africa Command, addresses female members of the Umbutfo Swaziland Defense Force during a military-to-military seminar in Mbabane, Swaziland. The seminar on gender-specific issues was designed to improve order, discipline and readiness of Swaziland's and Lesotho's militaries.

acknowledge—conflict prevention is a key objective, not only for reducing the further commitment of U.S. forces but also for fostering economic and societal development that helps address some of the root causes of instability worldwide. To the extent that we can apply the concepts from this new field manual to a broader context of global security, we will succeed in simplifying our approach to nonkinetic situations, strengthening our support to the whole-of-government effort and delivering the long-term effects we all desire.

Strategic Approach and Phase Zero

All elements of the Strategic Approach section of the first chapter apply to steady-state Phase Zero operations conducted by GCCs. The key difference is that Phase Four presumes the United States or some international body is in the lead, while Phase Zero sees the partner nation as the leader.

Conflict Transformation. FM 3-07 defines *conflict transformation* as "the process of reducing the means and motivations for violent conflict while developing more viable, peaceful alternatives." The manual focuses on the context of the "shift of responsibility for providing security and stability from the international community to the host nation," that is, shifting stability operations back to Phase Zero. The shift, however, often occurs before peaceful alternatives are established or before the host nation has matured sufficiently to offset potential return to violent conflict. The result is that some Phase Zero environments are actually long-standing stability operations.

We see such scenarios playing out in Africa, where the scars of decades-past conflicts still have an impact on domestic and regional security. Unresolved ethnic division, large displaced populations and widespread poverty affect ongoing security and development efforts in various parts of Africa.

Legitimacy. The field manual correctly describes *legitimacy* as "central to building trust and confidence among the people." The traditional view of legitimacy addresses the relationship between the governing and the governed, and paragraph 1-29 provides a listing of attributes for legitimate governance. In the case of stability operations, the governing party also includes the occupying elements of the international community as they seek conflict transformation. FM 3-07 correctly emphasizes the importance of the host nation gaining ownership of its security as a major step toward legitimacy.

Legitimacy in Phase Zero is just as important because the legitimacy of host nations is partly derived from the nature of their external relationships, including relationships with the United States. When our policies and activities contribute to others' perceptions of our partners honoring and upholding human rights, responding to the needs of their citizens or exercising sovereignty, then our partnership becomes stronger. Anything we do in the negative, even if it has nothing to do with a particular partner, can affect that partner's perception of our legitimacy. We experienced this as questions about our involvement in Iraq caused some African partners to be concerned that their own constituencies might see their relationship with us as negative.

An effective strategic communication campaign is vital

GEN. WILLIAM E. (KIP) WARD became the first commander of U.S. Africa Command in Stuttgart, Germany, in October 2007. His military service has included overseas tours in Korea, Egypt, Somalia, Bosnia, Israel and Germany as well as various assignments in the United States, including Alaska and Hawaii. Prior to assuming his current position, Gen. Ward was deputy commander, Headquarters U.S. European Command, Stuttgart, Germany. The author thanks Col. Thomas P. Galvin, U.S. Army, for his contributions to this article.

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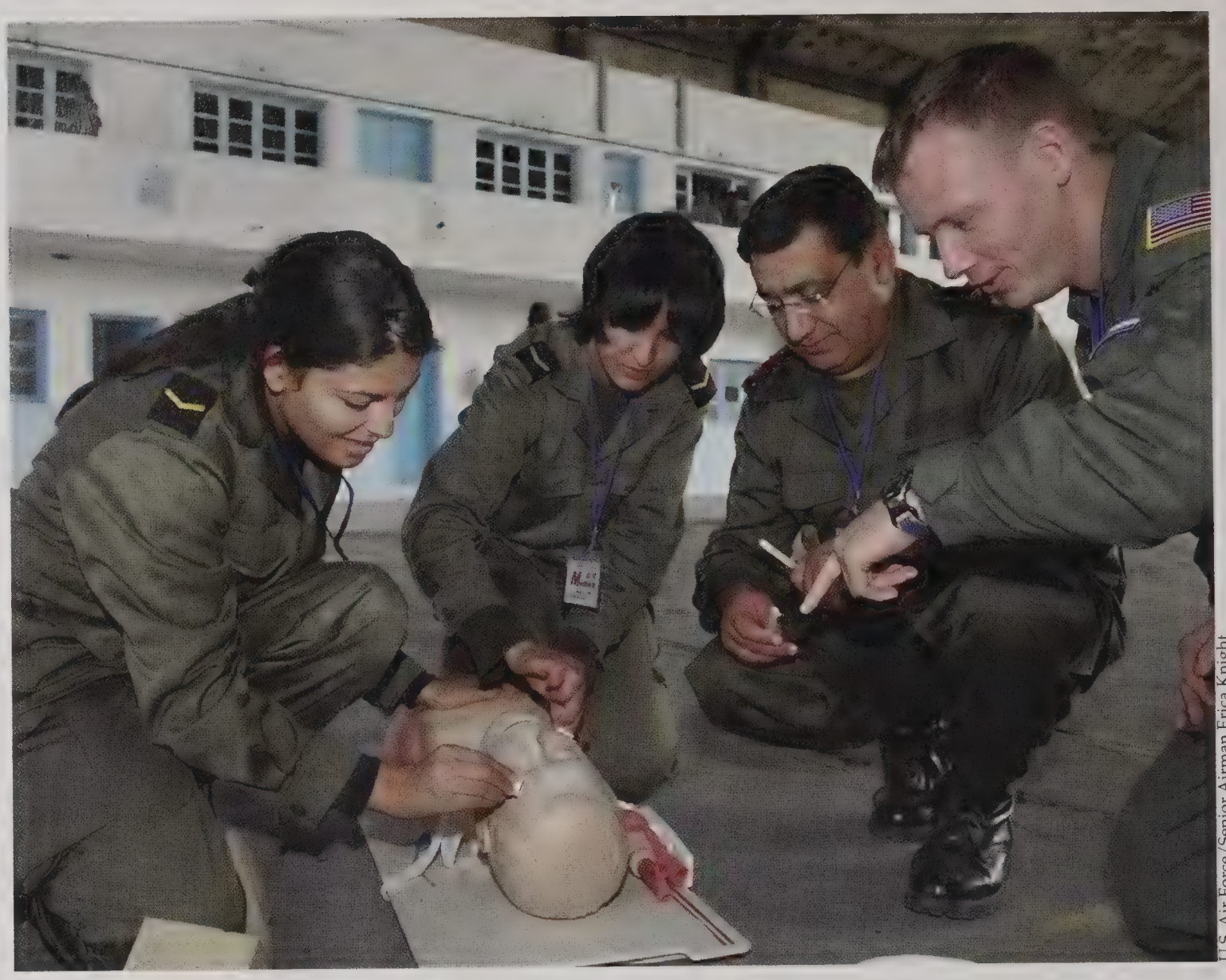
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2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints, color prints or color slides. Photographs must not be tinted or altered. (Send digital photos to jdow@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
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For further information, contact Jeremy Dow (jdow@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.



U.S. Air Force/Senior Airman Erica Knight

U.S. Air Force Senior Airman Brandon Dunn, right, an aeromedical technician, helps members of the Tunisian army treat a simulated shock victim at Kharrouba Air Base, Tunisia, as part of a Joint exercise among the U.S. Army and Air Force and Tunisian military health services.

in both stability and Phase Zero operations, and the objectives of the latter campaign are the same four as described in paragraph 1-30: mandate, manner, consent and expectations.

Of these four, the mandate is the most crucial. In the early stages of the command's formation, I emphasized to my staff that our security cooperation activities must come at the request of our partners. Such mandates support our national policy objectives by bolstering our partners' legitimacy. The 2008 Africa Partnership Station is a good example: It is an at-sea training platform that travels among ports across the continent to support capacity building for partner navies. The training conducted was based on the requests of the host nation, which assumed greater ownership of the capabilities we built, thus ensuring mission success. Subsequently we have been asked to conduct another Africa Partnership Station, which is now under way.

Capacity Building. Beyond large-scale military operations, building partners' security capacity constitutes almost all of a GCC's activities. As stated in FM 3-07, capacity building under stability operations "fosters institutional development" that manages the organizing, equipping, training and administering of a host nation's security forces. The presumption is that the host nations do not have the capability to do this themselves because their prior institutions were not legitimate or their national resources have been depleted to the extent that external intervention is required. The conclusion of Phase Four, therefore, implies that the host nation has established ownership and that external forces have moved from intervention to assistance, or even withdrawal.

But capacity building can be a lengthy process. Even within the United States, the evolving nature of the security environment drives us to continuously transform structures, training, equipment and business practices. Some small-scale efforts can produce quick results, but generally the complexity and the need to maintain readiness cause us to approach such efforts deliberately and cautiously.

Our partners face similar dynamics: They need some capabilities right now to address a current threat or challenge, but this complements a requirement for a broader security-sector reform effort toward a full institutional structure and corresponding culture. This requires a long-term plan developed and implemented in deliberate fashion through close partnership with the host nation.

Persistent and Sustained Security Engagement

Because stability operations are seen as temporary, FM 3-07 focuses on short-term effects that pursue the return to Phase Zero. One might mistakenly assume that this signals a reduction in the level of our engagement with our partners. The reality is the opposite: Phase Zero requires persistent security engagement that focuses on helping our partners achieve self-sustaining security, which requires a long-term effort. This does not equate to persistent levels of activity, such as constant training or exercises; instead, it calls for responsive communication, relationship building,

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Flintlock Public Affairs

Senegalese soldiers exit a U.S. Air Force Special Operations Command CV-22 Osprey during mission rehearsals as part of Exercise Flintlock in Bamako, Mali. Flintlock is a biannual multilateral military training exercise that seeks to further training and foster collaborative communication and coordination skills of participating nations across the Trans-Sahara region of Africa.

reliability and flexibility. Our partners may not need our services today, but they want to know that we will be there when they need assistance. That level of trust takes a long time to build and sustain.

Whole-of-Government Approach

FM 3-07 rightly devotes considerable attention to the roles that other U.S. government agencies, especially the Department of State and the United States Agency for International Development (USAID), play in stability operations and why U.S. military activities must be harmonized with their efforts. This is true in steady-state operations when the host nation has full autonomy and the right to choose its partners. Disharmony and conflict among U.S. government agencies encourage potential partners to look elsewhere for their security cooperation needs.

FM 3-07 is on point in devoting whole appendices to USAID's principles for reconstruction, development and interagency conflict assessment. The partnership between USAID and GCCs is as vital in steady-state operations as it is in stability operations because of the important link between security and development and because subject-matter expertise of USAID and GCCs in many of the world's trouble spots is unmatched. The conflict assessment tool includes approaches to conflict prevention under steady-state operations that we find useful in our GCC work.

FM 3-07 is a brilliant document. It is a terrific tool for its intended purpose—guiding Army leaders during stability operations. It is an essential tool for our broader engagement activities. Its logic and consistency across stability and Phase Zero operations should be further explored at the Joint level. ★

ARMY SAFE—A TEAM EFFORT

By Brig. Gen. William T. Wolf

Cpl. Johnson had just finished packing his bag when he heard a knock at his barracks door. It was Sgt. Givens, his squad leader, and he needed to talk to the young corporal. "Johnson, I just received your TRiPS form with your three-day weekend pass request," Sgt. Givens said. "It says you're planning to drive from Fort Bragg to your parents' house in Jackson, Miss., and back in three days. That just doesn't make much sense—it's well over 750 miles one way. Why don't we look at you taking leave for a week so that you have some time to actually enjoy your visit and not be driving back here exhausted?" Cpl. Johnson agreed that he would like to have some time to spend with his folks and sat down with his squad leader to make plans for his leave.

Here we can easily see how effective direct leader engagement with safety can—and does—work to mitigate the risks soldiers face every day. A total safety culture within an organization can be defined as a culture in which individuals hold safety as a value; feel a sense of responsibility for the safety of their fellow soldiers, civilians

Photos: U.S. Army Combat Readiness/Safety Center

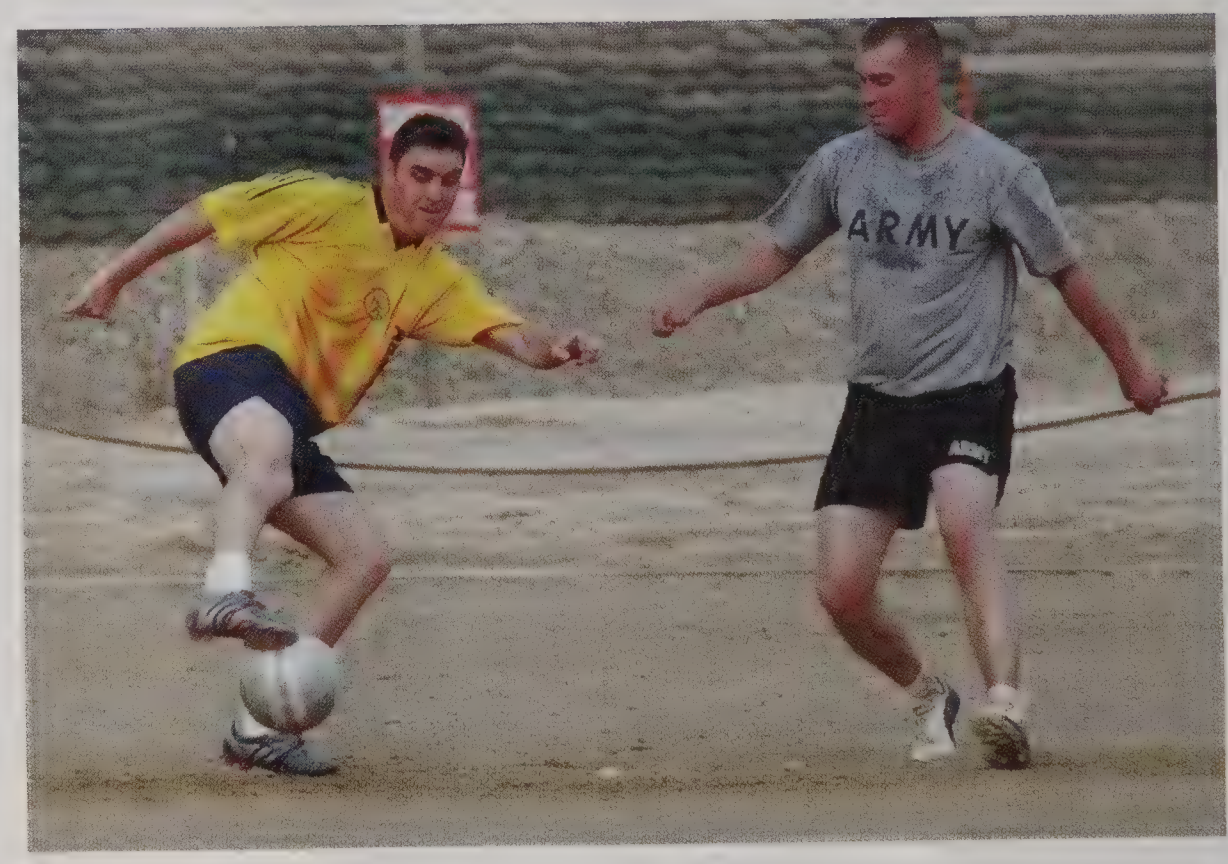


The Family Engagement Kit is designed to help increase family awareness of factors that can lead to off-duty accidents.

and family members, as well as themselves; and are willing and able to act on the sense of responsibility they feel—that is, individuals who take care of each other and ensure that the "band of brothers and sisters" is safe. In order to do that, they must have the necessary skills and tools and be supported by their leaders to go beyond the call of duty on behalf of the risk they and others in their formations face.

If leaders are committed to safety, they must have a highly visible presence to express their support. As leaders, how do you demonstrate care and concern for the soldiers, civilians and family members in your charge while influencing their behavior in a positive way? What kinds of approaches will have the highest levels of success? In his recent safety update, Army Chief of Staff Gen. George W. Casey Jr. asked all leaders to take a holistic look at their command environments and find ways to influence soldiers, family members and civilians to use composite risk management (CRM).

Leaders should start by enlisting the help and support of their Noncommissioned Officer Corps. These professionals not only know soldiers best but can make the best use of the principles of composite risk management integration. When used in concert with direct leader engagement, CRM will produce immediate positive results in the protection of the force and has been proven to be a combat multiplier. Organizations rely on a number of processes and procedures to manage risk and thereby decrease the chance of incidents, accidents and injuries. These processes and procedures include, but are not limited to, systems such as safety rules and procedures (compliance based), safety training, hazard identification and assessment, discipline, incident reporting and investigation, safety communications, safety suggestions, and rewards and recognition. Each of these processes and procedures is important in terms of improving safety and influencing an organization's safety culture.



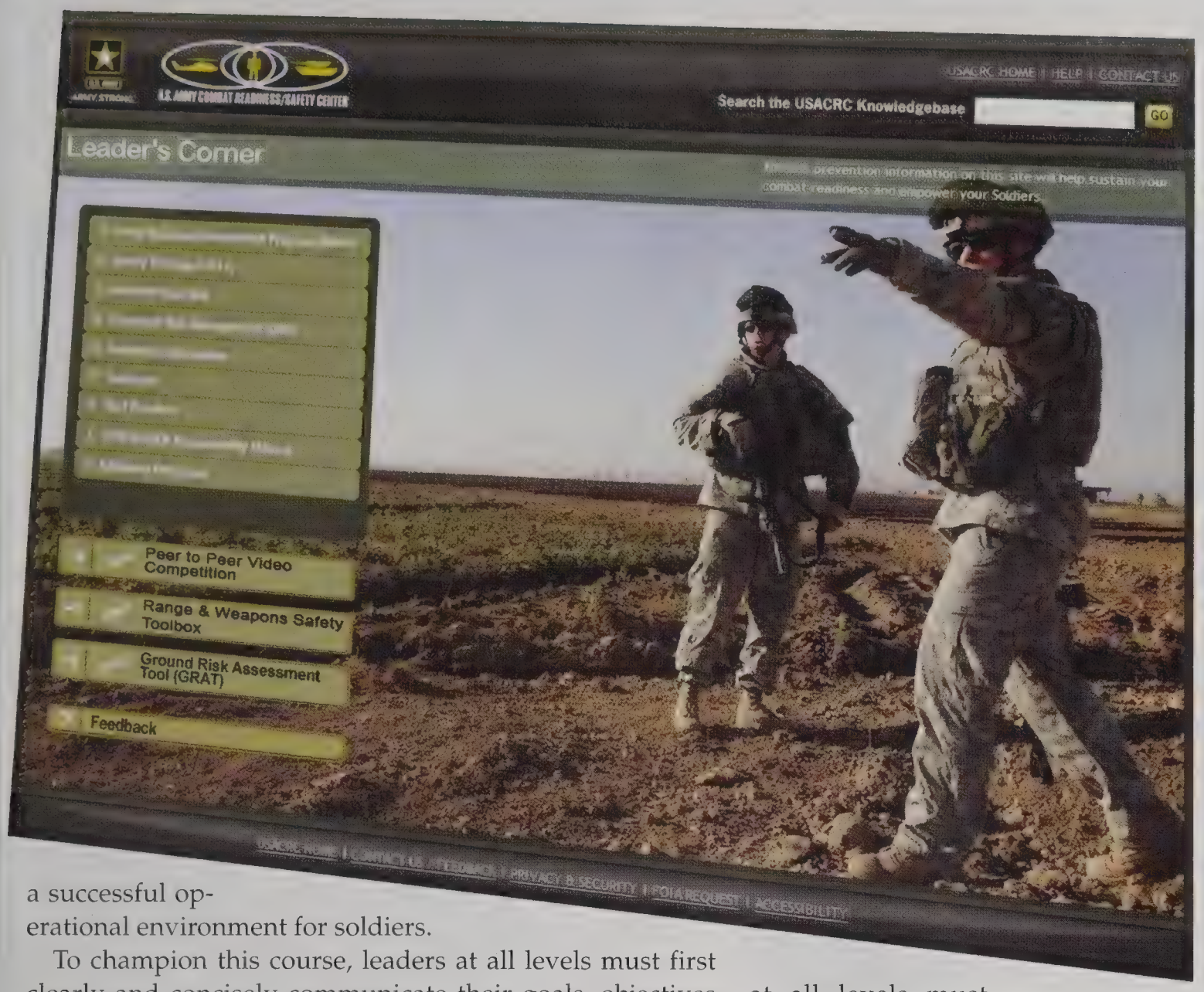
While playing sports is a great way to remain active and stay in shape, it can also lead to injuries.

When soldiers, civilians and family members are steadily involved with safety efforts, there is a greater sense of ownership and pride, particularly when success is realized. Leaders working with families, communities and peers build safer environments for the Army on and off duty.

Leader's Corner (https://crc.army.mil/leaderscorner/) is a great place to start to find the tools with which to build

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BRIG. GEN. WILLIAM T. WOLF is the director of Army safety and the commanding general of the U.S. Army Combat Readiness/Safety Center, a field operation agency under the Office of the Chief of Staff, Army.



The Leader's Corner on the Combat Readiness/Safety Center (CRC) web site educates leaders on loss prevention while sustaining combat readiness.

a successful operational environment for soldiers.

To champion this course, leaders at all levels must first clearly and concisely communicate their goals, objectives and standards for the organization. To garner support and better understand their soldiers, leaders must also be cognizant of their subordinates' values. The most important point is that soldiers *will* emulate the safety behaviors and practices—both good and bad—of their leaders, so leaders at all levels must uphold that responsibility.

Whether it is a tactical mission or a personal one, soldiers must not only understand the mission or goal but must also have an understanding of the associated risks. They need to possess the safety knowledge and risk information about their particular mission or task in order to make the best informed decisions. Leaders need to be involved, including being present when training is conducted and immediately halting at-risk behaviors so that they don't continue. When soldiers are not corrected immediately, at-risk behaviors will be recognized as acceptable, and undesirable actions will persist. If soldiers are regularly corrected, they must also repeatedly hear words of praise when they are doing the right thing.



The 'Better Opportunities for Single Soldiers' (BOSS) Safety Factor guide was designed to make single soldiers aware of hazards associated with their off-duty activities.

Family members are frequently the first line of defense in off-duty risk management and accident prevention.



Wearing the proper personal protective equipment can save a soldier's life; the CRC Motorcycle Mentorship program helps soldiers learn to be safe riders.



There is a saying that "doers do what checkers check." Our leaders must be omnipresent in their soldiers' lives both on and off duty. Gen. Casey confirms this need by stating that approximately 75 percent of the Army's accidental fatalities in fiscal year 2008 occurred off duty. Recently, the Army has experienced a slight rise in off-duty accidental losses while seeing a downward trend in on-duty accidental loss. Why is that? Direct leader involvement and engagement have proven time and again to make the difference. Leaders must take engagement one step further by being actively interested in what soldiers are doing with their time off and by helping them identify potentially high-risk activities or behaviors that could cause serious injury or loss of life.

A healthy safety behavior is directed by positive influences from leaders and motivated by consequences from these same leaders. Soldiers must know what right looks like and develop their own "safety sense" by learning how to think. Safety must therefore be inculcated in the early developmental phases of soldiers' training, and soldiers must be continuously mentored, reinforced and evaluated by leaders.

Peers also play an important role in how soldiers develop their sense of what's right and wrong. Peers are one of the three groups that influence soldiers on a daily basis; they can keep a bad situation from getting worse or leading to disaster. Soldiers are influenced by their friends and battle buddies, and they need to be brought into the fold of the band of brother and sisters, on duty and off duty.

Peers, and their views of safety, are one of the greatest influences in helping a soldier learn how to think—and always to think safety first—no matter what the task. The end state of this line of thinking will produce a desired and needed cultural shift in the way safety is viewed. Peers can find information about protecting their fellow soldiers on and off duty in the Boss Safety Factor guide on the Combat Readiness/Safety Center (CRC) web site, https://crc.army.mil. As CRM becomes an inherent part of every activity on and off duty for soldiers, it will become instinctive, intuitive and predictable.

Family members' and community participation in the safety of soldiers is paramount in all off-duty activities. Families and community members often become the "battle buddies" for soldiers when they are engaged in risky activities at home. They provide a level of personal contact and are best equipped to convey the message of just how important soldiers are in their lives. These personal contacts for soldiers will open honest and meaningful dialogue addressing unnecessary risk taking. Families shape the way soldiers think and react to given situations. The strength of our soldiers comes from the strength of their families.

Leaders, peers and families are charged with the protection of their soldiers both on and off duty. This responsibility can seem daunting for some, taking them well out of their comfort zone. The CRC hosts myriad tools online that will assist leaders in successfully and safely completing their mission on duty while mitigating the harmful effects of risk. The Chief of Staff of the Army encourages leaders to be creative and solicit the use of families and the community to help the Army save lives. Peers, families and community members can find information about protecting their loved ones while they are off duty in the Family Engagement Kit, also found on the CRC web site. With these tools and the support of other, more experienced leaders, the Army will drive down off-duty accidents and keep us all Army Strong. ★

Training Innovations

By Scott R. Gourley

"We continued to make improvements at both the home station and our combat training centers in our training programs, and the innovation and resources that we've put into these have combined to increase the realism of our irregular warfare training. At the same time, we are beginning to reset our combat training centers for conventional operations."

—Chief of Staff of the Army Gen. George W. Casey Jr.



All photographs: PEOSTRI

As noted by the Chief of Staff of the Army in his speech at the 2008 AUSA Annual Meeting, this is a very busy time in the training and simulation arena. As with all aspects of an Army in transformation, urgent training programs are geared to meet today's warfighter needs through innovations like vehicle rollover trainers and enhanced medical training, while modeling and simulation efforts are expanding to meet the needs of tomorrow.

These myriad activities are being conducted under the umbrella of the U.S. Army



Medical simulation training center systems at 18 locations prepare soldiers to administer first aid under combat conditions.

Program Executive Office for Simulation, Training and Instrumentation (PEO STRI). Located in Orlando, Fla., PEO STRI has the responsibility for providing materiel solutions and services in modeling, simulation, training and test/instrumentation in support of soldiers. The organizational structure encompasses a robust acquisition and support system buttressed by subordinate project management (PM) offices, including combined arms tactical trainers, constructive simulation, future force (simulation), field operations, instrumentation targets, and threat simulators and training devices.

"We are one of 12 PEOs, and we don't do anything by ourselves," said Dr. James T. Blake, U.S. Army PEO STRI. "We are part of this acquisition team that we call Army acquisition. I'm just one element of that team. My responsibility is to be a materiel developer for non-system and system training devices and training enablers. That doesn't happen without the hard work of the PEO STRI workforce and their continued efforts to ensure that our Army is the best-trained force in the world. We also have great support from the top to get this done. Finally, we have great relationships with the combat developers so that when these new requirements are developed and matured, we can properly get the best training devices under contract and provide them to our soldiers.

"Almost anything we do today is focused on the ARFORGEN [Army force generation] model," Blake continued. "That's clearly a focus for the Army, and it's clearly a focus for us. We try to ensure that training enablers are where they need to be, when they need to be there," so that soldiers receive the necessary training.

As a result of that team approach, the PEO STRI training portfolio currently includes more than 335,000 training devices fielded at 480 sites worldwide.



Component systems allow soldiers to train for specific medical interventions, such as applying a tourniquet or establishing an intravenous drip.

"We also have instrumentation and training systems at the combat training centers—everybody who trains for combat touches the systems we have," Blake said.

With more than $3.5 billion in contracts, Blake acknowledged that 2008 has been "a year of challenges. We've been fielding training devices out there rapidly. I think we have continued to raise the bar on the quality of product that we give the soldier, and I think we are continuing to reach out and make sure that the warfighters are getting what they need in a responsive way."

Blake mentioned medical simulation training centers (MSTC) as one example of that recent activity.

SCOTT R. GOURLEY, a freelance writer, is a contributing editor to ARMY Magazine.



Training with a variety of improvised explosive device (IED) simulators helps soldiers recognize the homemade bombs. More than 4,500 IED simulators were fielded in 2008.

"We now have 18 MSTC sites fielded," he said. "We had great support from the installations where they needed to be located in terms of finding facilities to house the system. MSTCs are heavily utilized—we even have them deployed forward in theater. We expect to have additional enhancements made to those devices, and we have built a program for that."

Forward-deployed MSTCs are located in Kuwait and Iraq, with additional satellite systems at three locations in Afghanistan.

"Another recent example is the community's response to the problem of improvised explosive devices [IED]," Blake continued. "We provided more than 4,500 trainers for IEDs in 2008. ... More than 42,000 people have undergone convoy training with the devices that have been fielded. I think it's safe to say that nearly all soldiers who went to theater and entered combat operations have used more and more of the devices that we have deployed on behalf of the Army."

In terms of activities over the coming year, Blake pointed to the development of both driver trainers and vehicle egress/rollover trainers for the large mine resistant ambush protected (MRAP) vehicle platforms.

"Based on an urgent need, we are currently developing MRAP rollover/egress trainers, such as the Humvee rollover trainer," Blake said. "We are also developing an MRAP common driver trainer variant that will be the third in a series of common driver trainers that we have, including Stryker and 'heavy,' or tank. The first one will roll out early this year."

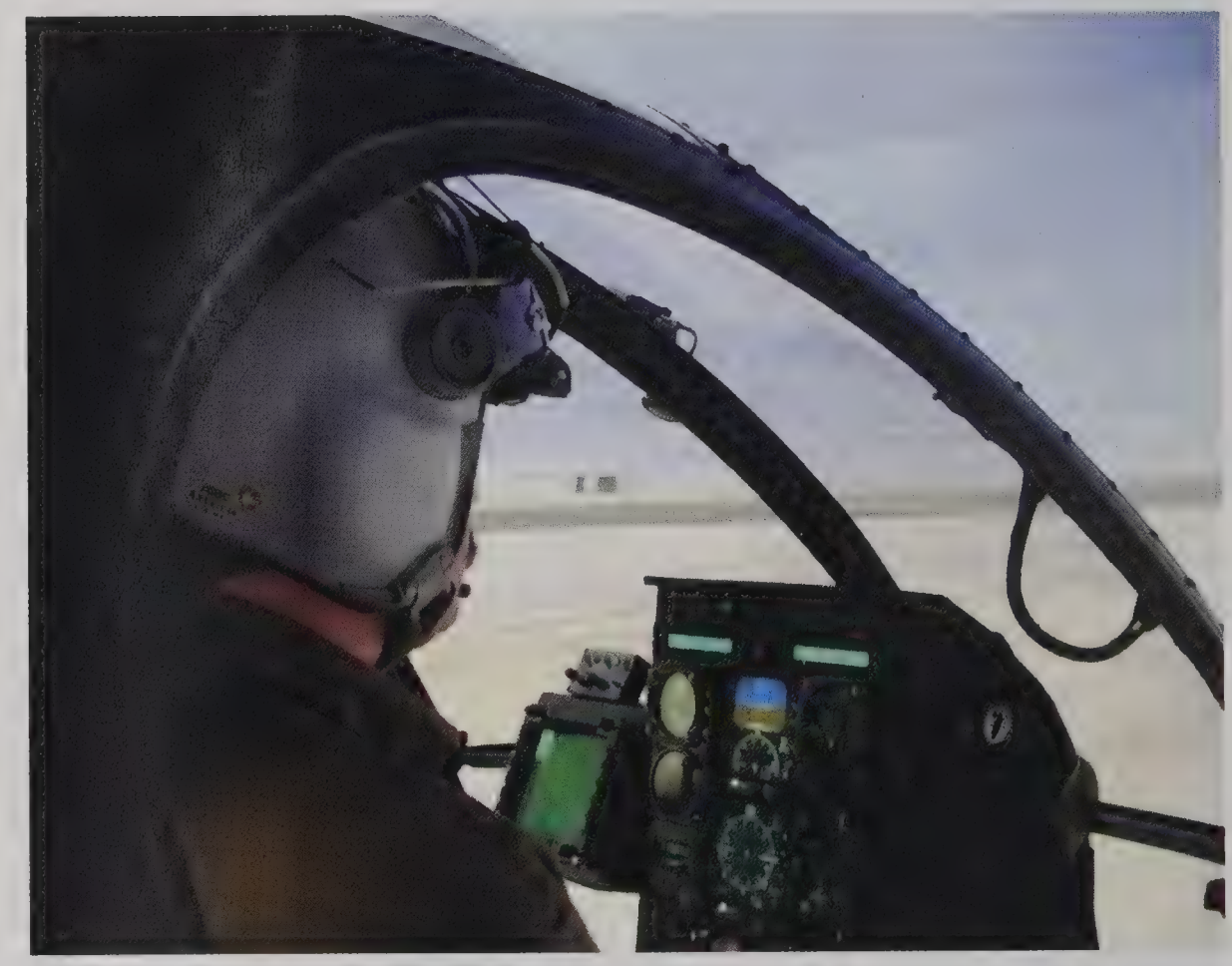
Noting that the time frame from receipt of funding to fielding of equipment stretched just "three or four months," Blake said: "This is another example of working as a team, and as a result we were able to get the requirements done, we were able to get the funding in place and we were able to get a contract executed to get equipment to the field for soldiers."

Current schedules call for fielding of seven MRAP egress trainers and an additional 13 mobile MRAP common driver trainers.

"There was an urgent need in theater for the Humvee egress assistance trainer, based on Humvee rollovers from IED explosions and people being injured," Blake said, "So some prototypes were developed in theater. Then an urgent need statement came in a year ago and asked us to build and field these devices on behalf of the Army as standard devices. We have produced and fielded more than 50 of these devices with literally tens of thousands of people going through training on them.

"We worked with PEO Combat Support & Combat Service Support. We used TARDEC [Tank Automotive Research Development and Engineering Center] to do a prototype [and] Red River Army Depot to do the production. We had a very close loop getting this thing out the door, and it was all done with Army. So that's a big success story where we leveraged all of the capabilities across the Army to make this fielding quickly and to make sure that the devices worked the first time. I think that's an important part of the Army story—we do have these symbiotic relationships. It's one Army.

"During this fiscal year development period, we will also have two elements that we are going to flesh out that



State-of-the-art flight simulators help Army aviators train for a variety of flight maneuvers.

are critical to the Army at large: One of those is one semiautomated forces (OneSAF), and the other is synthetic environment core (SE Core)," Blake said. "What is critical about both of these is that they will provide a way to combine constructive and virtual training environments into a common representation," he said. "You will be able to have a 'common chess board' with the 'chess pieces' being the same across different training devices. So we will all have a common operational picture."

OneSAF is a next-generation, entity-level simulation that supports both computer-generated forces and semiautomated forces, enabling it to support a wide range of both constructive and virtual simulations.

In terms of Joint service training interoperability, the Marine Corps already uses OneSAF in its combined arms command and control trainer upgrade system, the Air Force is working codevelopment efforts with the OneSAF program and there have already been six foreign military sales cases for OneSAF.

"It is going to be the Army standard for training—from individual up to brigade-level training—and it's being used in foreign military sales as well," Blake said.

"The SE Core program is also the program that they are going to use for Future Combat Systems (FCS) as an embedded solution," he explained. "There's definitely an FCS tie to that. And the beauty about the synthetic environment core is that they will have a common mapping model, so you can produce a database one time and use it for many different image generators.

"You will also have common visual models so that if you build a visual model once, then you can share that with everybody else's training devices and they will see the same thing."

"This is building towards commonality and interoperability. We in the PEO refer to that as a product line architecture framework, which enables us to build things that can be reused over and over again by all the [training] system PMs. That drives down the cost of fielding and increases interoperability because we see the same thing. There are huge savings on the back end, but on the front end, we also have the benefits of having a live, virtual and constructive training environment assembled very quickly. After all, if you have proprietary solutions or parts that are not common, it makes it very difficult to get things to work together seamlessly. This approach facilitates that seamless integration," he said.

Asked about the greatest challenges facing the PEO STRI community, Blake said, "We face the same challenge shared by everyone in the Office of the Secretary of Defense, and that involves our acquisition workforce. The acquisition workforce was not sized properly to handle this acquisition mission that we have. We're all struggling to get a properly trained, qualified workforce in place."

PEO STRI has embarked on a number of its own steps and initiatives to help move that process along. One example is the introduction of a locally based "acquisition academy."

"We took 21 interns—most of whom are young college graduates—into the 11-week program where we focused on their training so that they could be inserted into our organizational construct and be fully functional," Blake said. "It turned out to be very successful, with all 21 of them transitioning successfully. The challenge," Blake noted, "will be training qualified journeymen. We will eventually grow them. For the next five years, one of our big focuses will be to retain interns and mature them into journeyman-level team members.

"Obviously there will be other challenges in front of us as well," he added, "but we are up to any challenge. The big challenge for the nation is to make sure that we have competent, qualified government people, able to do the government's mission."

In terms of a PEO STRI message to warfighters, Blake said, "We like to think that we offer the best training enablers the United States can provide. And we hope that we will get constructive feedback from soldiers any time that there is a shortfall. We look forward to correcting any shortfall so that soldiers always have the best training equipment and training enablers possible." ★

Officer Education at CGSC:

The Origin, Revival and Value of the Staff Ride

In the early 1900s, a group of Army officers attending what would become the modern U.S. Army Command and General Staff College (CGSC) at Fort Leavenworth, Kan., boarded trains to travel to the South. They had prepared for the study of the Civil War campaigns of 1864 by reading extensive reports from both sides of the conflict. For the next couple of weeks, in what became known as a "staff ride," they rode the routes on horseback and visited the numerous battlefields of the Civil War.

By Lt. Col. Edwin L. Kennedy Jr.
U.S. Army retired



Lt. Col. Edwin L. Kennedy Jr., U.S. Army retired (left) and Charleston, S.C., police chief Reuben Greenberg take part in a CGSC staff ride on Folly Island, S.C. Chief Greenberg, a historian and reenactor, spoke on the role of black soldiers during the Civil War.

Photos courtesy of the author

The staff ride began as an analytical exercise used by the Army School of the Line (predecessor of the U.S. Army CGSC) Tactics Department to encourage students to conduct original research and delve into a level of study now known as operational art. It was part of the second-year course for selected students, intended to bridge the gap between tactical studies at the School of the Line at Fort Leavenworth and strategic studies conducted at the Army War College, originally located in Washington, D.C.

While the staff rides used historical venues, their primary purpose was the study and application of operations and tactics. History was only the vehicle for the study, not the primary purpose of the ride. The staff rides were conducted by tactics instructors with history backgrounds. The rides provided the context for intellectual discussions and analyses. Staff ride topics covered a wide variety of military subjects, including leadership, tactics, logistics, political considerations, strategic planning and the employment of large units over extended distances—operational art. The focus was the application of lessons learned to modern tactical circumstances.

One of the foremost tactics instructors at the School of the Line (subsequently known as the School of Application for Infantry and Cavalry) prior to World War I was Maj. Arthur L. Conger, a firm believer that military history served its best purpose not in rote memorization and lecture by pedantic instructors but in "doing." He advocated that students perform detailed analyses of campaigns. Maj. Conger considered the process of deduction the most important learning aspect. The staff ride format fit Maj. Conger's teaching model perfectly. Students conducted extensive preparations for the staff rides, studying battle reports, reading accounts and studying maps before actually going to campaign and battle locations.

Until the staff college closed during World War I, officers continued to conduct staff rides as part of the educational reforms instituted by Gen. J. Franklin Bell. Significantly, a number of the officers who led the Army in World War I participated in the first staff ride to Atlanta, which had a considerable impact on their understanding of the complexity of large-scale operations and logistical planning.

After a hiatus of more than 60 years, staff rides were revived in the early 1980s through the newly formed Combat Studies Institute (CSI). When CSI opened in 1979, it was staffed by a core of professional military historians—civilians with detailed military history knowledge but little or no practical military experience—and U.S. Army officers who were certified military historians with field expertise that enhanced the academic aspect of study with practical application. Staff rides were normally conducted with a mix of active duty officers—with their military experience—and civilian faculty—with their particular historical expertise.

LT. COL. EDWIN L. KENNEDY JR., USA Ret., is a certified Army historian and currently teaches tactics and operations in the Center for Army Tactics, U.S. Army Command and General Staff College, Fort Leavenworth, Kan.



As part of the Westport staff ride, Marine Corps veteran Charles Walthall gives a living history presentation on the defense of the river line by federal forces at the Little Blue River battlefield park, east of Kansas City, Mo.

Today U.S. Marine Corps students entering CGSC are introduced to tactics and operational art concepts in their annual Westport, Mo., staff ride. Westport saw one of the largest western battles during the Civil War, only 30 miles from Fort Leavenworth. Fought between federal forces and a cavalry corps under Confederate general Sterling Price, the battle of Westport offers a number of opportunities to discuss a campaign using modern doctrine. Because the culmination of the campaign was essentially at the town of Westport (now downtown Kansas City), it allows the study of the movement of large units on both sides over extended distances during relatively long periods of time. Political and cultural matters, so important to our current operations, are also integrated into the study of this campaign.

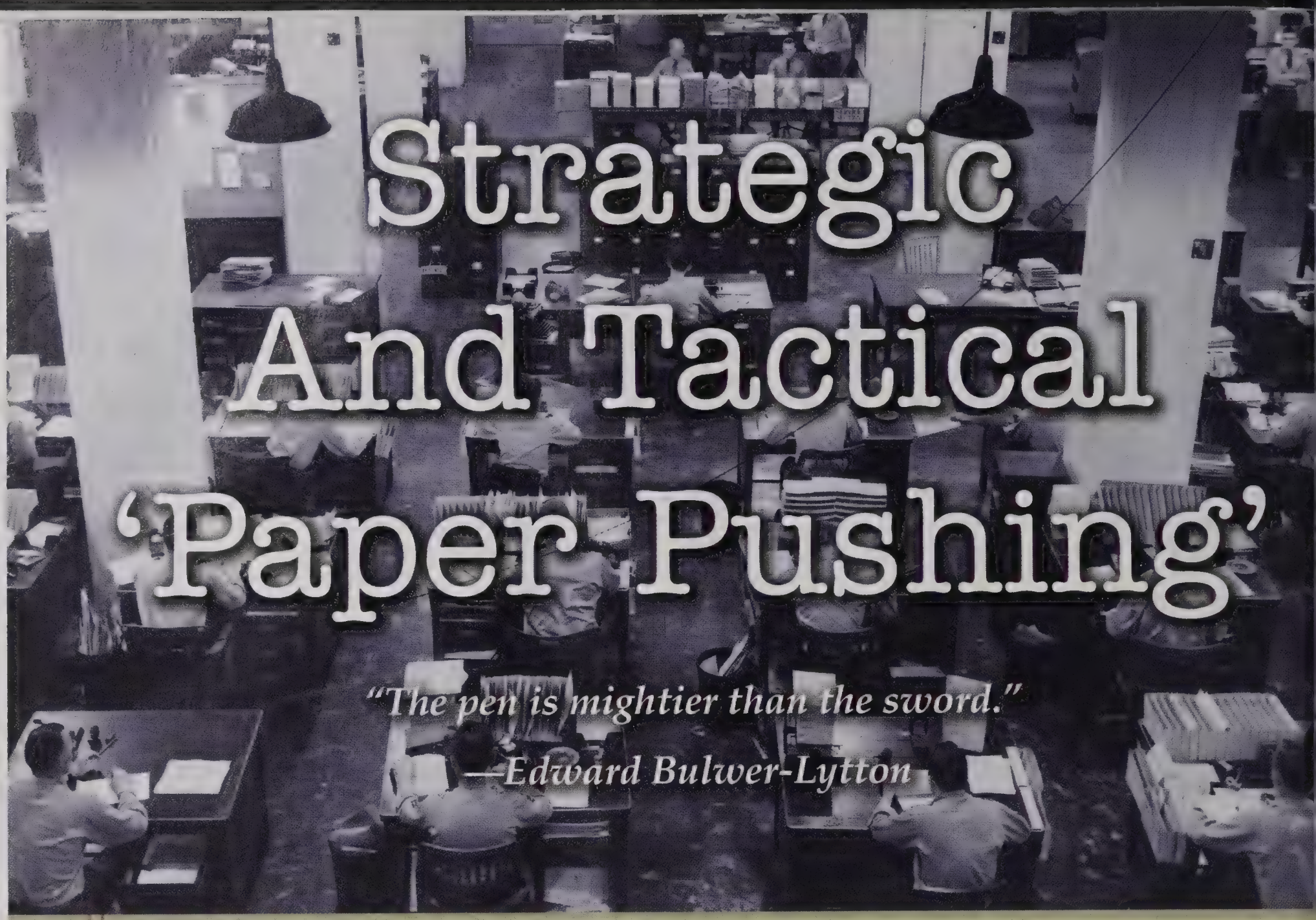
The U.S. Army's baseline doctrinal manual, FM 3-0 *Operations*, is divided into the full spectrum operations elements of "offense, defense, stability and support to civil authorities." It also considers the elements of operational design—aspects the military uses to plan campaigns. Although few of these current doctrinal terms were articulated in 1864, they can easily be applied *ex post facto* to the study of the Westport battle and associated campaigns. This is exactly what the U.S. Marine Corps students entering CGSC are exposed to every summer during their preparatory course. Col. Mark Monroe, commander of the Marine detachment, believes that the study of the battle of Westport allows the Marine Corps students to "examine and enhance their understanding of principles and warfare, command relationships and campaign design. More than a history lesson, ... [the instructors] applied models of time, space and forces, ends, and ways and means that gave the students a valuable intellectual framework" for further tactical and operational studies.

Westport is only one of several staff rides available at CGSC. Students of Fort Leavenworth's University of Foreign Cultural and Military Studies have used the 1863 raid on Lawrence, Kan., by Capt. William Quantrill as a case study that "link[s historical events] to ongoing events in Iraq and Afghanistan." Specifically, the relationship between the federal occupying forces and the people provides excellent context for the problems encountered with cultural differences and ensuing friction. In addition, the second- and third-order effects of military forces involved in civil affairs provide an excellent basis of study regarding military-civil interface, something the Army encounters constantly in current operations overseas.

Staff rides continue to serve as important educational tools in today's military. More than just history lessons, they provide real-life examples of what Clausewitz calls the "friction" of war. Students are able to visualize the terrain over which forces moved and fought, evaluating and analyzing the decisions commanders made at the time—all while standing on the actual ground of the battles and campaigns. Students must give their opinions on primary tasks of defensive operations or offensive operations, explaining why they would use their particular tactics based on the terrain, forces available at the time and the context of the situation. Modern tactics sometimes share a thread of continuity with actions of the past, and students gain a new perspective from visiting the actual battle sites, more easily understanding how the campaign unfolded and determining where key decisions should have been made and why they were made the way they were.

Since decisions are made by imperfect men, the "human dimension" is still important today and can be analyzed based on personal experiences. Soldiers and marines can empathize with the hardships experienced by the men who fought in the past—being cold, hungry and wet today allows the participants on the staff ride to relate to past soldiers who did not have the quality of protective gear now available.

The conclusion of the staff ride is not the end of learning. Students continue to discuss the actions studied, applying lessons learned throughout their intellectual experiences for the rest of the year at the staff college. Many of them refer to the lessons of the staff ride for the rest of their careers—the last part of the staff ride, the integration phase. Staff rides continue to serve important functions in teaching modern tactics and operations to students and organizations—and they teach American history at the same time. ★



Strategic And Tactical 'Paper Pushing'

"The pen is mightier than the sword."
—Edward Bulwer-Lytton

By Col. John M. Collins
U.S. Army retired

The U.S. Army puts such a high premium on command that few commissioned officers who have not previously commanded at company, battalion and brigade levels ever wear stars, whereas most professional staff officers who make superlative performance possible cap careers with eagles on their shoulders if they are lucky. General officers, as a general rule, are consequently grand tacticians and practitioners of operational art who win battles and campaigns but seldom excel at grand strategy, which wins wars. That sorry state will persist as long as most U.S. Army officers yearn for command and scorn "paper pushing."

My eccentric experiences suggest that diversified strategic, operational and tactical staff assignments can enhance U.S. national security by providing commanders with sharp intellectual tools and can also simultaneously improve subsequent prospects for civilian careers.

Strategic Intelligence

My only penance in the Pentagon was between November 1950 and January 1953, as a captain and the Army G-2's Arab-Israeli desk officer, assigned solely because I had earned a graduate degree in geography on the GI Bill. Extensive tutelage was immediately required, since I lacked intelligence experience at any level and knew next to nothing about the Middle East.

Step one was to attend a three-week course at the Strategic Intelligence School on Constitution Avenue near what is now the Vietnam Memorial. That institution has long since disappeared, but I still lean heavily on lessons learned in its classrooms. The value of unclassified materials, for example, became crystal clear when I combed newspapers and periodicals to develop an open-source order of battle for U.S. armed forces and, within a brief period, located all newly installed Nike Ajax surface-to-air missile sites around Washington, D.C., and learned the number of launchers per battery and the names of some battery commanders. Maps drawn to scale showed the best access and escape routes. Intelligence-gathering techniques acquired at that institution helped a lot when members of Congress asked me to prepare unclassified U.S.-Soviet military balance assessments from 1975 until the U.S.S.R. collapsed.

Strategic Intelligence School and subsequent attendance at several of DoD's academic institutions confirmed that progressive education facilitates professional staff work. Many observers viewed my matriculation at two staff colleges and two senior service colleges as overkill, but every course served as a unique building block. Other paper pushers should formally or informally enhance their knowledge bases at every opportunity.

Introductions to the Middle East, for example, were real eye-openers. My civilian supervisor had to tell me that *Mordecai* was a Jewish name. I discovered that U.S. military attachés moved about less freely in Israel, a U.S. ally, than they did in the Soviet Union, an enemy of the United States. The best qualified Arab and Iranian officers often spurned attendance at U.S. military schools because lengthy absences would remove them from *baksheesh* (graft) chains that lined their pockets.

Updating card files that summarized the idiosyncrasies and aspirations of key officials in countries I surveyed consumed considerable time but was worth it because personal histories illuminated pecking orders, probable lines of succession and other politico-military relationships.

I attended a summer seminar that the American University of Beirut (AUB) conducted for the State Department in 1952. Our Navy declined its invitation, but the Army, Air Force, Marine Corps and CIA participated. Arab professors presided over graduate-level courses that covered regional geography, cultures, history, influences of Islam and contemporary problems. All three Army attendees were chauffeured throughout Lebanon, Jordan and a good deal of Syria, which soon was closed to outsiders. The entire class toured Jerusalem, Hebron, Bethlehem and adjacent territories. The trip to Tel Aviv via Cyprus came last, because no Arab country would honor passports that contained an Israeli visa. Impressions gained during those brief weeks at AUB and as the Army G-2's Arab-Israeli guru not only improved my value as a Middle East analyst in the Pentagon but stimulated interests that remain intense.

Theater Intelligence

The choice at that juncture might have been to specialize in Middle East matters or branch out, but I was posted to the Far East, which put me on the road that read *generalist* rather than *specialist*.

Ensuing assignments developed global rather than regional perspectives, but either path can reward paper pushers with a career that is personally satisfying and simultaneously contributes to U.S. national security.

The staff billet I occupied briefly after the Korean War ended was geographer with a military intelligence group in Japan, preparing town plans primarily along the Trans-Siberian Railroad from Lake Baikal to the Pacific—Irkutsk, Ulan-Ude, Chita, Blagoveshchensk and Khabarovsk remain etched in my mind. Source materials centered on reports that Nisei civilians compiled by interrogating Japanese prisoners recently repatriated from Soviet slave labor camps, but I sometimes wonder how closely our depictions resembled satellite photographs taken many years later. Familiarization with all of Siberia east of the Yenisei River nevertheless paid serendipitous dividends when I began to assess U.S.-Soviet military balances in 1975.

I soon switched to current intelligence with Army Forces Far East, where my mission was to prepare daily intelligence summaries in the dead of night for use every morning by Gen. Maxwell D. Taylor and key members of his staff. That assignment, which lasted through May 1955, focused my attention on politico-military developments throughout eastern Siberia, China, Taiwan, both Koreas and Japan. I functioned as the chief (and only) member of a review unit that established production schedules for then-Brig. Gen. H.J. Vander Heide's Intelligence Division, then critiqued all reports for organization, content and style before publication. Being judge, juror and executioner didn't make me the world's most popular person, but I learned a lot about East Asia across the board.

Operational and Tactical Intelligence

At the operational level, I cut my teeth on Operational Plan (OPLAN) Swaggerstick in 1957 as a member of the G-2 Plans Section, XVIII Airborne Corps. Related efforts conveniently concerned the Middle East, my specialty in the Pentagon several years earlier. It soon became apparent to supervisors and peers alike that I'd found my niche. Then-Maj. Gen. Hamilton H. Howze, the 82nd Airborne Division commander, was the first of several senior generals who began to ask for me by name about that time. Other paper pushers would likewise do well to hitch their wagons to stars and cultivate flag-level patron saints.

Gen. Howze made me his assistant G-2 later that year and

almost immediately thereafter demanded a "professional" briefing map for a major field exercise dubbed *Oil Slick.* Hard-nosed Lt. Col. Chet McCoid, my new boss, said, "Produce a beaut not later than 0600 hours tomorrow morning." Paul Connolly, the section sergeant, chose a private first class to undertake that task because he was a genius at layer-tinting military maps with different colored chalks to differentiate elevations. Hair spray from the post exchange prevented smears. Reporting time was right after evening chow, but "my" PFC didn't appear until long after dark. I put him to work without recriminations, then tore huge strips off his backside *after* he colored a map that pleased Gen. Howze completely. When we parted company after midnight, Sgt. Connolly admiringly remarked, "That was the school solution, sir!" I similarly employed layer-tinting techniques to great advantage as chief of Gen. William C. Westmoreland's campaign planning group in Vietnam one decade later.

Contingency Planning

Traditional progression up any promotion ladder is preferable, but my helter-skelter trips from top to bottom and back up again produced no ill side effects. Other paper pushers similarly should relax and enjoy the ride if their careers don't develop in straight lines because the erratic sequence of staff assignments rarely is injurious.

Then-Lt. Gen. Westmoreland, Gen. Howze's successor at XVIII Airborne Corps, sacked the G-3 planner responsible for the mess in Cuba and made me his replacement in September 1963. Reasons for change were obvious because OPLAN 316, as it was called then, required major refinements and updating after the missile crisis subsided. Airstreams that headed from western departure bases toward eastern objective areas crisscrossed over the Florida Strait with flights that flew from east to west. Paratroopers who overshot coastal drop zones west of Havana would have drowned in Mariel Bay, and vegetation akin to Spanish bayonet covered other drop zones.

Responsibility for OPLAN 316 required close and continuous collaboration with Continental Army Command (now Training and Doctrine Command) at Fort Monroe, Va., every XVIII Airborne Corps staff section (especially logisticians) and planners in every subordinate division. (Lou Menetrey, then a captain with the 101st Airborne Division, ended up with four stars in Korea.)

I also maintained close contact with counterparts in Virginia—at Naval Station Norfolk, Naval Amphibious Base Little Creek and Langley Air Force Base—and the 2nd Marine Division at Camp Lejeune, where Capt. P.X. Kelley (later Marine Corps commandant) was my counterpart. Orientation tours at Guantánamo in 1964—coupled with naval briefings at Puerto Rico's Roosevelt Roads and on Vieques—sharpened appreciation for U.S. footholds in Cuba and Caribbean springboards. OPLAN 316, in short, gave me a grand introduction to joint contingency planning.

Feasibility Studies

Paper pushers shouldn't despair when "bitter" temporarily supersedes "better" until personnel managers or dumb luck improve their prospects. In September 1967, when I was a brand-new bird colonel, for example, I occupied a dead-end assignment. Gen. Westmoreland, in his capacity as commander, U.S. Military Assistance Command Vietnam, placed me atop a recently activated campaign planning group (CPG) after the first incumbent flopped.

My small, handpicked joint staff included an executive officer plus six Army officers who specialized in intelligence, combined-arms tactics, heliborne operations, engineering, telecommunications and land transportation. Two Air Force officers handled fixed-wing airlift and weather. A sergeant major, plus a few clerks, rounded out the CPG roster, but I had easy entrée to every major Army command in Vietnam, III Marine Amphibious Force, Seventh Air Force, 5th Special Forces Group and the supersensitive Studies and Observation Group.

Responsibilities initially concentrated on feasibility studies to determine whether Gen. Westmoreland's monsoon plans would work (one for the wet season, one for the dry). The first requirement arrived just before supper time one evening. I said, "No sweat. We'll wrap it all up in three weeks." Think again. "Gen. [Bruce] Palmer wants a full dress briefing at 0800 tomorrow morning. No notes allowed. You have to look authoritative." We worked all night, and at 0800 on the dot I made my bleary-eyed pitch, replete with slides. Three weeks of further investigation merely refined our quick and dirty conclusions. That exhilarating experience taught me a lot about responsive staff work under extreme pressure.

Operational Planning

The campaign planning mission soon changed from feasibility studies to operational planning. OPLAN El Paso, designed to block the Ho Chi Minh Trail for six months during a dry season bracketed by six months of rain, came first. Memorable events included a trip to Bangkok, where I coordinated with Thai armed forces on our open west flank; aerial reconnaissance throughout I Corps tactical zone (especially routes from the coast to Khe Sanh and down the A Shau Valley, where enemy gunners drilled my engineer through one leg); and flights across the Laotian panhandle at levels so low I could see hair on the backs of little elephants working fields. I hallucinated about my name in lights as the architect of operations that successfully severed the Ho Chi Minh Trail, but that fantasy disappeared in a puff of smoke in March 1968 when President Lyndon B. Johnson told an international television audience that he would not run for reelection and retrenchment

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COL. JOHN M. COLLINS, USA Ret., first wrote for ARMY Magazine in 1959. He was senior specialist in national defense with the Congressional Research Service for nearly 24 years after retirement and currently steers the Warlord Loop, an e-mail network whose 325 members debate national security issues from every quadrant of the compass.

began. When I laid out the plan for Generals Westmoreland and Creighton Abrams, his four-star deputy, Westmoreland said, "I'd like to go to Tchepone [Laos], but I haven't got the tickets." OPLAN El Paso didn't see the light of day until 1998, when I inserted basic elements into my *Military Geography* opus as a case study.

Military Strategy Instructor

There may be no better way for paper pushers of any stripe to share priceless experiences with other officers and civilians than as professors within DoD's professional military education system. Activities that emphasized military strategy replaced tactical and operational planning for the rest of my military career when I joined the National War College faculty in June 1968. Area studies, which then consumed about half of each academic year, immeasurably broadened the perspectives of students and faculty alike. Lt. Gen. John E. Kelly, impressed by my coverage of the Arab-Israeli conflict, said, "You are now director of military strategy studies." My response was, "Sir, I can't even spell *strategy*," to which he replied, "Neither can anyone else. Go make a name for yourself." That challenge changed the remainder of my life.



My first military strategy syllabus taught me more than it taught students because, unlike any other course director, I wrote a brief introduction to each of 19 topics, then posed a series of questions to guide intellectual investigation. The table of contents opened with the fundamentals of military strategy and the nature of modern war, followed by threats, military strategies during the Nixon administration, implementing force postures and a quick look at the impact of science and technology. A comprehensive assessment capped the course.

Open Publication

Paper pushers who write books and articles for open publication can vastly increase their sphere of influence by capturing the attention of readers throughout U.S. national security departments and agencies, academia, think tanks, research institutes, business, the news media, U.S. service schools, allied embassies and military establishments abroad. I therefore expanded my National War College syllabus into a primer entitled *Strategy for Beginners,* which was rejected nine times before the Naval Institute Press finally published it under the title *Grand Strategy: Principles and Practices.* The dustcover crowed: "This is the only book on grand strategy. Liddell Hart's classic *Strategy* contains a seven-page chapter on the subject. Most texts ignore it entirely." The *Economist* in London wryly remarked that if nobody had previously written a book about grand strategy, neither had I. That conclusion, of course, was correct because *Grand Strategy* barely nodded at political, economic, cultural, informational and psychological ramifications. Pluses nevertheless overrode minuses. The August 8, 1975, issue of *Economika, Politika, Ideologiya* in Moscow praised the book for "fundamental research carried out in this complex, multifaceted and contradictory field." Other plaudits followed. Russian, Chinese, Japanese, Korean and Spanish editions appeared, the first two without regard for copyright.

Edward Bulwer-Lytton was wrong when he wrote, "The pen is mightier than the sword," because each of those instruments serves best under given circumstances. Military paper pushers working out of sight behind the scenes wield pens that complement warriors' swords every day in ways that are visible to few observers. Their efforts nevertheless help shape sensible command decisions at every level and, in the process, conserve precious lives and resources. ★

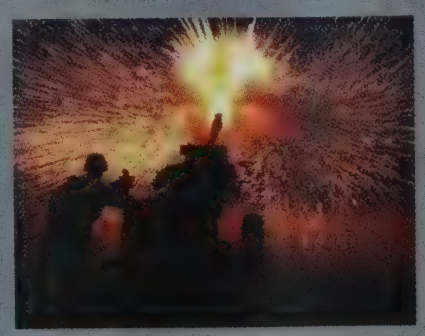
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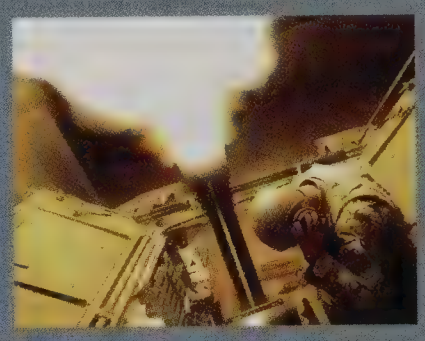
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Celebrating the Lincoln Bicentennial

On the 200th anniversary of Abraham Lincoln's birth, the nation reflects not only on his presidential legacy, but also on his achievements as Commander in Chief. Long recognized as an eloquent orator and skilled politician, America's 16th President was also the consummate Commander in Chief. A host of new books, academic conferences, special exhibits and celebrations mark the Lincoln bicentennial.

"With Malice Toward None: The Abraham Lincoln Bicentennial Exhibition" at the Library of Congress will display some of his correspondence, including a Christmas letter of thanks to Gen. William T. Sherman for the capture of Savannah, Ga.; a highly critical missive, unsent, to Gen. George Meade berating him for his failure to pursue Gen. Robert E. Lee after the Battle of Gettysburg; the signed commission of Gen. Ulysses S. Grant as lieutenant general; and notes chiding Gen. George B. McClellan for his dallying. The exhibition also includes the Bible Lincoln used for his swearing-in, photographs, period engravings, artifacts and other rarely seen items from the Library's extensive collection. The exhibit opens February 12, runs through May 9 and will then travel to five other cities. Other federal sites—among them the National Portrait Gallery, the National Archives and the National Museum of American History—are also planning special displays. Ford's Theatre, where Lincoln was shot just five days after Lee's surrender, is reopening after an 18-month renovation and offering a series of lectures, panels and performances in addition to two free open houses.

One among a flood of new books inspired by the bicentennial, *In Lincoln's Hand: His Original Manuscripts with Commentary by Distinguished Americans* is a companion volume to the Library of Congress exhibit. It features essays about important documents such as the "Gettysburg Address" and Lincoln's second inaugural address. Two of the new anthologies and biographies focus on Lincoln in his role as strategist: James M. McPherson's *Tried by War: Abraham Lincoln as Commander in Chief* and Craig L. Symonds' *Lincoln and His Admirals.*

Below is a listing of events, exhibits and publications celebrating Lincoln. For additional nationwide listings, visit www.lincolnbicentennial.gov/calendar.

Washington, D.C.

American Art Museum, 8th and F Streets, NW. "The Honor of Your Company Is Requested: President Lincoln's Inaugural Ball," exhibiting a menu and invitation among other artifacts, will run through January 2010. www.gosmithsonian.com/lincoln

Ford's Theatre, 514 10th Street, NW. The theater's many events include the world premiere of James Still's "The Heavens Are Hung in Black" (previews begin February 3), two complimentary open houses held on Lincoln's Birthday (February 12) and Presidents Day (February 16), and daily tours beginning February 17. www.fordstheatre.org

Library of Congress, Jefferson Building, 10 1st Street, SE. "With Malice Toward None: The Abraham Lincoln Bicentennial Exhibition" opens on February 12, displaying photographs, letters, speeches and books through May 9. www.loc.gov

National Archives, National Mall at Constitution Avenue and 9th Street, NW. The original Emancipation Proclamation will be on display in the National Archives East Rotunda Gallery from February 12–16, along with other documents, films and lectures. www.archives.gov

National Museum of American History, 14th Street and Constitution Avenue, NW. "Abraham Lincoln: An Extraordinary Life" brings together for the first time the museum's Lincoln collection. "America's New Birth of Freedom" exhibits letters, a signed copy of the Emancipation Proclamation and other documents from the Abraham Lincoln Presidential Library and Museum in Springfield, Ill. www.gosmithsonian.com/lincoln

National Portrait Gallery, 8th and F Streets, NW. "One Life: The Mask of Lincoln" exhibits portraits from the gallery's collection through July 5. www.gosmithsonian.com/lincoln

Events Outside Washington, D.C.

Abraham Lincoln Presidential Library and Museum, 212 North 6th Street, Springfield, Ill. Exhibits, lectures and discussions are being held all month. www.alplm.org

Illinois. Statewide bell ringing, February 12.

New York Historical Society, 170 Central Park West, at 77th Street. From February 12, Lincoln documents will be on display and several events will be held. www.nyhistory.org

Thomas D. Clark Center for Kentucky History, 100 West Broadway, Frankfort, Ky. An interactive display, "Beyond the Log Cabin: Kentucky's Abraham Lincoln," runs through June 6. http://history.ky.gov ★

Recommended Reading

Goodwin, Doris Kearns, *Team of Rivals: The Political Genius of Abraham Lincoln* (New York: Simon & Schuster, 2005)

Marrin, Albert, *Commander in Chief: Abraham Lincoln and the Civil War* (New York: Dutton Children's Books, 1997)

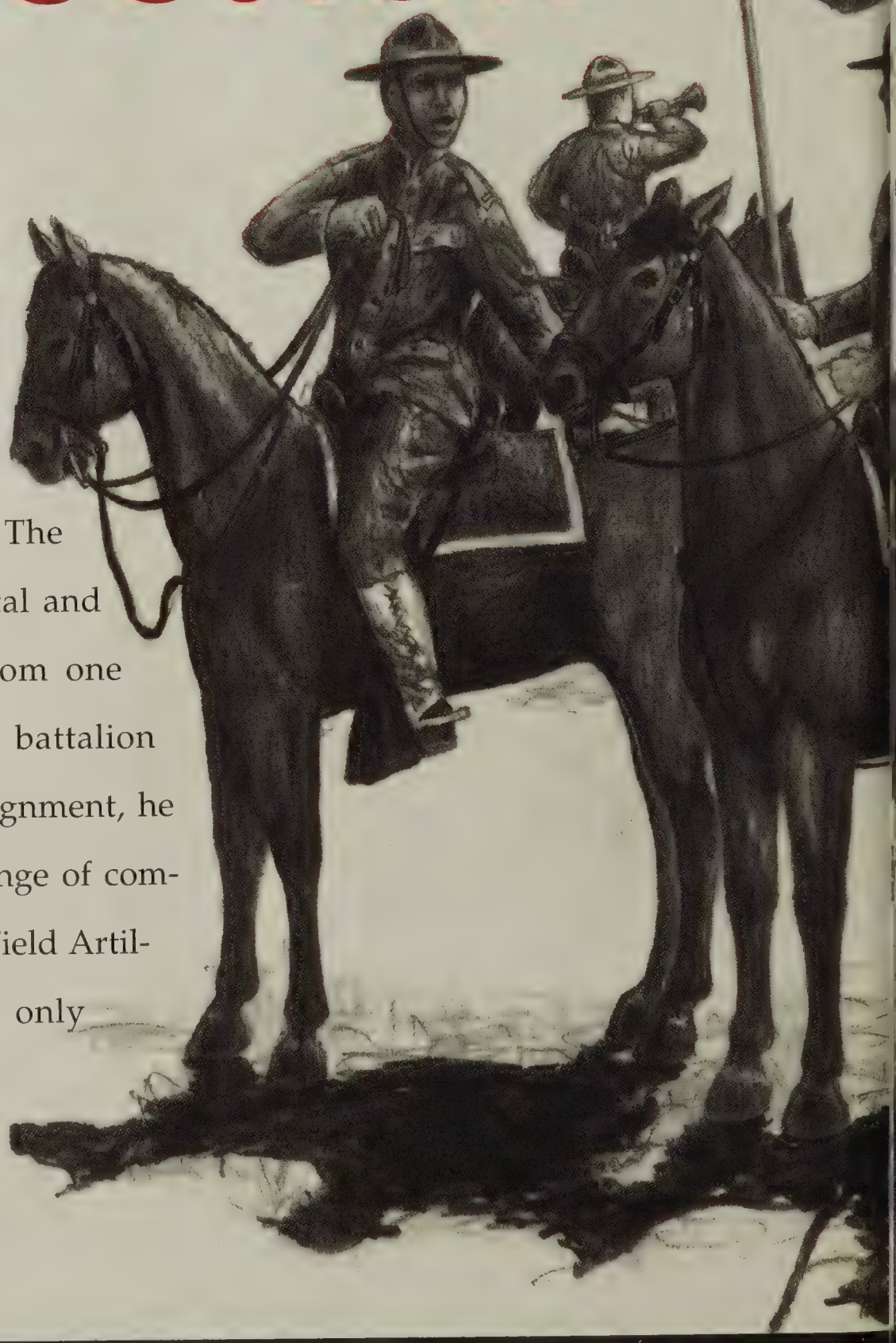
McPherson, James M., *Tried By War: Abraham Lincoln as Commander in Chief* (New York: The Penguin Press, 2008)

Symonds, Craig L., *Lincoln and His Admirals* (New York: Oxford University Press, 2008)

Williams, T. Harry, *Lincoln and His Generals* (New York: Gramercy, 2001)

Pass in Review: The Tale Of The Flying Half Section

By David Rackley,
Lt. Col. Frank Womble
U.S. Army retired
and Lt. Col. Jim Patrie
U.S. Army retired



A change of command is a special event requiring a synchronicity unrivaled in the civilian world. The ceremony commemorates the physical and emotional passage of leadership from one commander to the next. When our battalion commander announced his new assignment, he had very specific designs for his change of command. Since the 2nd Battalion, 10th Field Artillery (the Rock's Support), was the only field artillery battalion at Fort Benning, Ga., something special was

needed to mark the proud traditions of our branch and show our infantry brethren how it was done.

The outgoing battalion commander called for a traditional parade with artillery half section, marching band and soldiers marching in tight formation. There would be hundreds of invited guests, including several general officers. The weather had to be perfect: sunny and clear, but not too hot. Immediate "Yes, Sirs" resounded in the conference room. We stood and saluted the boss. He smiled, knowing his change of command would be one to remember.

Then reality struck. The excitement of the moment vanished as the enormity of the project became clear. We had eight weeks to pull off a major event in relative isolation from the rest of the Field Artillery world—our branch home at Fort Sill, Okla., was more than 900 miles away. With a clear mission and a rapidly approaching deadline, we did the only thing we could. Good weather was ordered from the chaplain and the S-2; the bandmaster of the Infantry Center Band was given his instructions; bleachers were located and moved on-site; plans and timelines were drawn up. We were a busy bunch of professionals, giving orders and carrying out the mission.

Suddenly, it dawned on us that the Infantry Museum would not have the artillery caisson and cannon that we needed. We placed a call to the Field Artillery Association at Fort Sill to request the services of their world-famous Field Artillery Half Section—the Army's last horse-drawn artillery unit. Their response to our request was shocking: The team could not travel to our location. We contacted the Field Artillery Museum and learned we could borrow parts of a caisson and some period uniforms. We agreed, and the component parts were scheduled for truck delivery to us at Fort Benning.

The event began to come together. Invitations were mailed, scripts were written and parade rehearsals began. But where was the caisson? Where would we get horses trained to pull wagons? With three weeks left before the event, a tractor-trailer arrived with wagon wheels, a disassembled caisson and a rusty cannon. We opened a wooden crate to find a mix of leather harnesses, woolen shirts, canvas trousers and "Smokey Bear" hats.

With 500 soldiers available, we found that we had a wealth of talent to make old stuff look good and work together. SFC Wilburn, the S-2 noncommissioned officer in charge and self-proclaimed rodeo star, knew horses and was promptly placed in charge of the half section that we didn't yet have. In short order, SFC Wilburn's team found four riding horses stabled at Fort Benning; the owners agreed to have their horses trained to pull a wagon. Wives volunteered to mend the old uniforms. Round-the-clock teams of Red Legs began assembling the caisson and making the old cannon presentable.

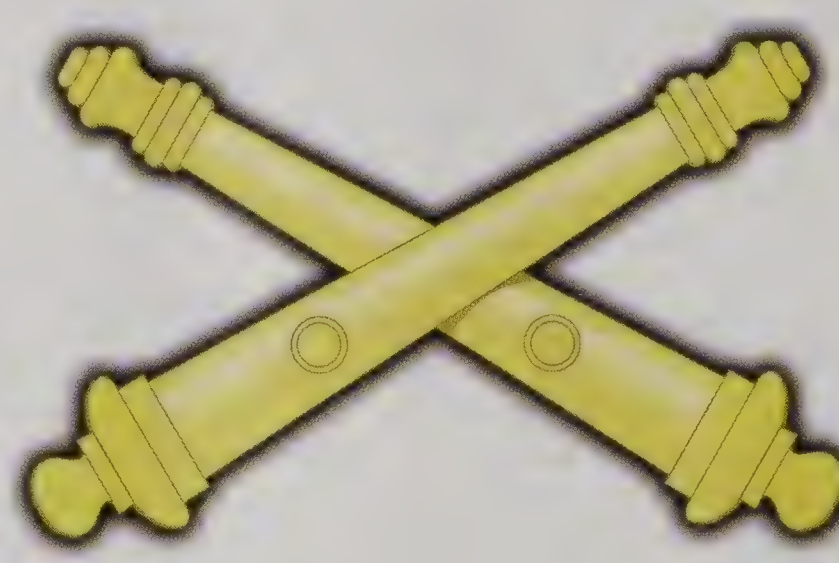
With two weeks to go, all attention turned to rehearsals. The band sent a bass drummer to practice with us. We formed our troops and relearned how to march to the beat of a drum. Everything had to be spit-and-polish: the steps, the turns, the salutes. On the third day of rehearsals, the refurbished caisson, cannon and team of horses arrived to



U.S. Field Artillery Association

join the practice. Riding horses that have never pulled anything is a bit spooky, at best. With patience and encouragement, the horses and soldiers of our newly formed half section came together nicely. The horses even adjusted to the beat of the drum. The procession was stately. We were all proud. After more rehearsals and a couple of well-deserved rest days, we were ready.

The day of the event arrived—a glorious sunny morning. The reviewing stand was bright in the sunlight. Red, white and blue bunting decorated the fence lines and handrails. Soldiers marched onto the parade field. The band and half section arrived and took their positions. Guests took their seats, and the ceremony began.



The adjutant, Capt. Dave Rackley, kicked things off in style by snapping to attention and loudly commanding the band: *Sound off.* Unfortunately, their spirited playing and movement across the parade field promptly spooked the half section's horses, which had never seen or heard a military marching band play until that moment. SFC Wilburn, unable to calm the unnerved horses, moved them from their starting position at the far right of the line of troops, passing behind the assembled battalion to a protective tree line at the far left of the line, completely out of sight.

The change of command continued smoothly. The battalion colors were duly exchanged between the outgoing and incoming commanders. Speeches were made and applauded. Finally, the command we had all waited for was given: *Pass in review.* Maj. Jim Patrie, battalion S-3 and commander of troops, performed an about-face to echo the command and turned pale as a ghost. The half section, which we had sweated and labored over, was nowhere to be seen. He muttered to the staff: "Where is that @#$%&* half section?!" In doubt, but without hesitating, he executed the next command: *Half section in review.* Nothing happened. Left with no option, he then commanded the entire battalion to pass in review. But SFC Wilburn, having patiently waited for and clearly having heard *Half section in review,* had already mounted his horse.

Several things happened at once. Maj. Patrie commanded the battalion staff: *Right turn, march.* They started moving across the parade field to assume their position in the line of march in front of the band. The bandmaster commanded the band: *Forward march.* The headquarters battery commander commanded his battery to *Right turn, march* and to fall in behind the band.

Suddenly the half section burst out of the tree line and quickly accelerated to a full gallop. It was now a race. Who would make the turn first—the half section, the band or the battalion staff? Disaster loomed. With terrified soldiers hanging on for dear life, the horses raced ahead, bringing with them a certain unplanned bravado and thick clouds of dust. The spirited beasts passed the band, made a hard left turn, sprinted past the startled battalion staff and slowed to a brisk trot in front of the reviewing stand. On cue, the narrator's voice boomed out of the speakers, frightening the horses yet again. They bucked in their traces a bit but settled down enough to complete the pass-in-review without further incident. The mounted soldiers managed a formal salute and faced back to the front as the put-upon horses galloped away from the rest of the parade. The crowd went wild! No one had anticipated the expertise of such an obviously well-trained crew. (The half section was actually supposed to halt in front of the reviewing stand, place the cannon into service, fire a shot, remount and proceed off the field. Given the state of the horses, there was absolutely no chance of this happening.)

The rest of the formation made its way past the reviewing stand. Each battery proudly marched by in turn and performed the required salutes. The parade was magnificent. Sitting in the stands, the adjutant's wife overheard someone remark: "How in the world did they get everything to move at once?"

Two days later, the commander of troops received a letter on general officer stationery:

Major Patrie,
Best change-of-command ceremony I've ever seen.
Sincerely,
MG David Grange ★

DAVID RACKLEY served on active duty in the U.S. Army from 1977 to 1988. He was battalion adjutant, then battery commander, of Battery C, 2nd Battalion, 10th Field Artillery. His final assignment was at the U.S. Army Field Artillery Board at Fort Sill, Okla. He is the director of consumer product analysis at AT&T Labs in Austin, Texas. LT. COL. FRANK WOMBLE, USA Ret., served on active duty from 1977 to 2002. He was battalion motor officer, then battalion S-4 and commander of Service Battery, 2nd Battalion, 10th Field Artillery. His final assignment was on the Army Staff in the Office of the Assistant Chief of Staff of Installation Management. He is a defense contractor for System Studies and Simulation Inc. at the U.S. Army Training and Doctrine Command, Fort Monroe, Va. LT. COL. JIM PATRIE, USA Ret., served on active duty from 1969 to 1990. He was battalion S-3 of 2nd Battalion, 10th Field Artillery. His final assignment was Field Artillery Force Development, the Pentagon. He is president and owner of 30-A Management Services Inc. in Tuscaloosa, Ala.

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From: Company Commanders

Platoon Leaders' Stories

Our experiences as platoon leaders shaped our understanding of the Army and of our place within it as leaders. Today's lieutenants are learning to lead American Soldiers in a time of war, when the stakes are greater and the challenges more complex than ever. Although every officer's experience is unique, there are some experiences that are widespread among today's platoon leaders—such as taking charge while deployed, operating in foreign cultures, leading in combat and feeling the intense emotions born of war. By reflecting on their stories, we can gain insights that enable us to lead and mentor our lieutenants more effectively. The following stories—which are among the hundreds that junior officers have voluntarily shared with their peers via the CompanyCommand and PlatoonLeader forums—remind us what it means to lead at the proverbial tip of the spear.

Taking Charge

Lt. Stephanie Gillespie sat across from her brigade commander in his office.

"What are your goals?" he asked.

"I want to be a platoon leader," Stephanie replied. She had been working as an assistant S-3 at brigade for the two weeks since she had arrived in Iraq straight from the chemical officer basic course. Her deployment experience so far had been disappointing. After all, she hadn't left a successful career as a teacher and joined the Army as a 28-year-old just to make slides and write memos about staff actions in an air-conditioned building. She wanted to lead Soldiers.

"Are you willing to take *any* platoon?" asked the colonel. He seemed to have something in mind.

"Any platoon!" she assured him. As her father had 30 years before, Stephanie wanted to be a platoon leader.



Lt. Stephanie Gillespie took over a convoy-security platoon for which she was expected to raise standards. Her leadership was tested immediately.

Soon after she left the commander's office, Stephanie received word that her wish had been granted. She was to pack her bags immediately and move to a different FOB and take charge of an Army Reserve platoon of quartermaster Soldiers who were performing an "in-lieu-of" convoy-security mission. She and another new lieutenant in the brigade were being sent to the unit because of perceived leadership issues. The company she was joining had not had an officer platoon leader for five years.

Stephanie's plan for taking charge was to lie low at first—to assess the situation and get to know her people before taking action on any of the



Lt. Gillespie (front, middle) relaxes with members of her platoon during a layover between convoy-security missions.

problems she might identify. There was, however, one issue that Stephanie was prepared to address immediately. Her unit, she was told by her command sergeant major, had a reputation for poor uniform discipline outside the wire. The Soldiers did not always wear all of their protective gear while on missions. Stephanie felt confident that she could correct this shortcoming right away. She knew what "right" looked like, and safety was too important to postpone.

Hours before the start of her platoon's first mission after her arrival, Stephanie took the patrol leader aside and reminded him of the uniform standard—Kevlar, IBA, DAPS for gunners, gloves, eye and hearing protection, elbow and knee pads. She wanted to be sure that something as basic as minimum uniform standards didn't become an issue. Several hours later, the Soldiers showed up for their patrol brief and rehearsal. The only protective gear they carried were their Kevlars and IBA.

Stephanie could feel her heartbeat quicken. *This is why they sent me here.* She went to her company commander and explained the situation to her and indicated her intention to make the Soldiers get into the right uniform.

"OK, that's fine with me," replied her passive commander, a major.

Stephanie returned to the platoon and reminded the convoy commander that the Soldiers had to wear complete uniforms on the mission.

"It can't happen, ma'am," said the NCO. "There's not time; we can't miss SP time." The mission was set to begin in two hours, and the platoon's barracks were a mile away from the motor pool where they were assembled.

"It can't *not* happen," insisted Stephanie as calmly as she could. "You know the uniform standard. I reminded you of the standard earlier today. It's your job to enforce the standard, Sergeant. You have trucks to move everyone back and forth to the company area. There's time to get in uniform and accomplish the mission. Now stop arguing with me and do your job."

When her Soldiers returned to their barracks to get their equipment, Stephanie realized how deep the problem was. Some Soldiers couldn't find gloves; others had to unpack locked duffel bags to find their DAPS and knee pads. It was painfully clear that these Soldiers had not worn the prescribed uniform in a long time. The Soldiers were not at all happy to be forced to scramble for their gear, but they did manage to meet their mission start time.

Communicating Across Cultures

Lt. Brian Lebiednik looked at the doorway just behind him. He saw, or rather smelled, footprints leading from the door to where he stood. Sewage residue. *Damn.*

"I'm sorry about that," he said through his interpreter to the eldest male of the house. The local responded with gestures indicating that it didn't matter. Nonetheless, Lebiednik realized that tracking human excrement into someone's house isn't good for winning hearts and minds. *Then again, they shouldn't dump their chamber pots in the driveway.*

"Are there any weapons in your house, sir?" Lebiednik asked. The local shook his head no.



Lt. Brian Lebiednik (right) and his platoon's forward observer, Sgt. Jason Carte, rest outside a house in Iraq while staging for a patrol.

"Well, we have to do a quick search anyway. Please move your family and all other personnel outside the house." His interpreter translated the message, and the Iraqi moved upstairs, corralled his family, and led a parade of women and children outside. Lebiednik signaled his platoon to start searching.

Within seconds of searching, one of his Soldiers came downstairs with an infant in his arms.

"Sir, I think the man might want his baby."

Lebiednik summoned the homeowner again.

"Why didn't you take your child when I told you to move your family outside? He could have been hurt."

After translation, the Iraqi looked confused.

"For the record, this counts as a person, too," Lebiednik said, handing the child over to the local. The man took the infant outside, and the search resumed.

Moments later, a Soldier came downstairs carrying an AK-47. Lebiednik called his interpreter and summoned the eldest male yet again.

"Why didn't you tell me there was a Kalashnikov in here? You said you had no weapons."

The Iraqi stumbled through his reply. The interpreter pieced it together and summarized the stammering: "He says it's for personal protection. It's not a weapon."

Dear God. "Ask him if he has any more personal protection paraphernalia." Lebiednik noticed his interpreter's confusion over the word *paraphernalia.* He simplified: "Personal protection 'stuff,' I mean."

The Iraqi shook his head no.

Moments later, one of Lebiednik's soldiers came downstairs, a shotgun in hand. Lebiednik cursed under his breath and called the man back into the house.

"Can you tell me what this is?" Lebiednik asked, pointing at the shotgun.

"That's not a weapon. That's for hunting," came the reply.

Lebiednik rubbed his temples and thought through every possible phraseology that might avoid the confusion.

"Ask him if he has anything else in the house that can be used to kill people."

Once again: no.

After about another minute of searching, an NCO came down the stairs carrying a pellet gun.

"That's for shooting birds," the interpreter said.

Fertile Crescent Seinfeld.

"You didn't find any bombs up there, did you?" Lebiednik asked his NCO.

"None, sir."

"All right, let's get the hell outta here. Sheesh."

Responding to an IED Ambush

Lt. Mike Johnston reached across the Humvee and slapped his driver on the arm.

"It feels good to be in the middle of the pack for once," Johnston said.

Johnston was the platoon leader of his battalion commander's personal security detachment (PSD). Usually, Johnston's vehicle led their convoys.



First Lt. Mike Johnston formed, trained and led the personal security detachment for his battalion commander in Iraq.

Today, however, the battalion was occupying a new area of operations. American vehicles had not driven this road, Route Malibu, in months. They were moving into enemy territory, so a route-clearing element was in front of the PSD. Engineer vehicles led the movement, followed by a platoon of infantry, then Johnston's element. Johnston's vehicle was just in front of his commander's, which was tenth in the order of march, a relatively safe position.

BOOM!

The noise and concussion shook Johnston's bones. *I'm hit.* Then he realized he hadn't been hit. The explosion had occurred behind him—right where the commander's truck should have been. Looking back, all he saw was a Humvee door sailing through the air about 30 feet high. *The battalion commander is blown to smithereens.*

Johnston sent a quick contact report to battalion and then heard a radio report from his medic, who was in the truck behind the commander's.

"Polar Bear 6's truck is flipped upside down and off the side of the road!"

Johnston jumped out of his truck and started running back along the road. Debris was still falling. The first thing he noticed as he approached the vehicle was the massive crater—15 feet wide and 5 feet deep—that obliterated the raised roadway. Then he noticed blue Diet Pepsi cans strewn everywhere. The blast had blown off the back hatch of the commander's Humvee, and the contents of the trunk



The Humvee of Lt. Johnston's battalion commander rests upside down along Route Malibu. The blast killed his interpreter. The commander was rescued and treated, and he continued to lead his unit for the remainder of the deployment. The "rat claw" is still visible on the commander's door.

had been jettisoned. Diesel fuel from the vehicle's cracked fuel tank was dripping over everything and everyone inside the upside-down truck.

The Humvee's nearside back door was open, and the first thing Johnston saw was the commander's interpreter, nicknamed Scarface, unconscious and suspended upside down by his seat belt. The back third of his head was cracked wide open, his brain matter exposed. Johnston quickly looked into the TC's seat and assessed his battalion commander. He was conscious and yelling in pain, bleeding from his ears and mouth.

Glossary

DAPS—deltoid and axillary protective system, which protects the Soldier's shoulders and upper arms and is typically worn by gunners and other exposed, mounted personnel.
EOD—explosive ordnance disposal.
IBA—interceptor body armor, which protects the Soldier's torso.
IED—improvised explosive device.
JERRV—joint explosive ordnance disposal rapid response vehicle.
Kevlar—the protective helmet worn by Soldiers.
MBITR—multiband inter/intra team radio, which is a small handheld radio.
S-3—operations officer.
SP—start point, the time at which an operation begins.
TC—truck commander, who sits in the front passenger seat of a military vehicle.
TOC—tactical operations center.

Scarface needs treatment first. Do I move him … or will that screw him up worse? There's no time to debate.

Johnston began pulling the interpreter from the vehicle. The vehicle's driver, Spc. Martinez, joined him. Johnston looked upon the Soldier, who wore only ACUs. *Where the hell's your gear?* Then he saw Martinez's IBA, still tangled on equipment in the driver's compartment. Martinez had slipped out of his IBA in order to extricate himself from the vehicle. *He's out here on a battlefield without his equipment, risking his life to save his fellow Soldiers.* Johnston felt proud to lead such men. Together, Johnston and Martinez pulled Scarface out of the truck and onto the road, where the platoon medic, Sgt. Shane Courville, immediately began treating him.

Johnston and Martinez turned their attention to rescuing their battalion commander. His door was combat-locked, and the commander—dazed, bloodied, bruised and soaked in diesel fuel—was having difficulty staying alert. Johnston worried that the vehicle would go up in flames at any moment. He coached his commander to unlock the door's combat lock. Johnston and Martinez, both weight lifters, strained against the door, pulling with all their might to open it. The door wouldn't budge.

How are we going to get him out? If we have to wait for equipment, that's an hour at best. We don't have that much time.

Then Johnston remembered the "rat claw." When he had been at brigade headquarters a couple weeks earlier, the brigade safety officer had handed him a prototype rat claw that he had developed to pull doors off Humvees. Only one per battalion had been issued. Johnston had thrown it into the trunk of one of his vehicles and hadn't given it another thought … until now. Fortunately, that vehicle was in the

convoy today. Unfortunately, it was last in the order of march, at least 200 meters away.

Johnston sprinted down the road. He felt totally exposed. The IED had been command-detonated. He knew it was likely that he was being watched. His understrength platoon had no dismounts to spare. His only protection as he ran along the raised roadway were his gunners atop Humvees, positioned 50 meters apart from one another along his route.

Johnston arrived at the last vehicle. The back hatch wouldn't open. *Aahhh!* He beat on it. No luck. He climbed up on the hatch and stomped up and down as hard as he could. Finally, the hatch popped. Johnston pulled the hatch open and dug through the gear to find the rat claw. It wasn't small. At one end was a large, heavy metal claw designed to clamp onto Humvee doors. Several long cables came off it with hooks on their ends to affix to vehicles or winches. Johnston began his sprint back to the commander's destroyed truck. He held the claw to his chest with both arms, the cables resting over his shoulders, the hooks dragging along the ground behind him. Johnston, a collegiate athlete who prided himself on staying in top physical condition, was shocked at how exhausted he felt. *How the hell is it possible that I have to do this? Running my ass off, exposed to the enemy, dragging godforsaken hooks behind me, and my commander could go up in flames any second. This sucks.*

Back at his commander's truck, Johnston clamped the claw to the stuck door and then guided his own vehicle into position to hook up to the cables. It was time to try pulling the door off. *I hope it doesn't cause a spark that sends everything up in flames.* Everyone held his breath as the vehicle pulled forward. The door popped off without a hitch. The claw worked exactly as designed.

Johnston and the medic struggled to pull their commander out of the vehicle. He was a big man, and it seemed like every piece of equipment got stuck on everything possible as they attempted to extricate him. As soon as they got him out and onto the ground, the commander went into shock. The medic, who had snaked a tube into Scarface and was still treating him, gave verbal instructions to Martinez, who successfully treated and stabilized his commander.

With his commander safe, the situation began to come under control for Johnston. Using his MBITR radio, he sent reports to the nearest company, which relayed them to the battalion TOC. The infantry platoon that had been in the convoy—which had inexplicably stayed with the engineers and not stopped after the IED attack—finally returned and provided security. With adequate security established, a medevac bird came in for the commander, landing in an Iraqi family's front yard next to the crash site. The destroyed vehicle's gunner, who was less seriously injured, had been able to crawl out of the turret and was evacuated by the EOD JERRV vehicle.

Scarface died on the road. The platoon placed him in a body bag and laid it across the back seat of one of their trucks for the short trip to the patrol base. The gunner essentially had to sit on the body, which he found upsetting—Scarface was like a member of the platoon.

On what should have been a short movement, another IED was found alongside the road. Johnston and his platoon had to wait on the road for about 35 minutes as an EOD team arrived and destroyed the ordnance in place. Johnston used the time to talk with his battalion TOC, correcting inaccuracies in earlier reports the TOC had received about the ambush.

Welcome Home

Lt. Schuyler Williamson gazed out the bus window at the passing lights of Fort Hood, Texas. It was hard to believe that he was finally back in America. Everything looked strangely peaceful and routine. He felt a slight tremor inside and wondered whether it was caused by exhaustion or excitement.



Second Lt. Schuyler Williamson (center, kneeling) poses with his platoon at the beginning of their deployment.



Lt. Williamson shares a laugh with his soldiers at their command post at Forward Operating Base Liberty in Baghdad.

The convoy of buses came to a stop at the division parade field. To his left, under the lights across the field, Schuyler could see the crowd of family members and friends who awaited his battalion. He knew that his wife was somewhere in that crowd, and his parents, too.

He filed off the bus with his Soldiers. He and the rest of the battalion from the other buses formed up in the street, where the line of buses blocked them from their families' view. The night air was cool and smelled like home.

A chant from across the field started softly and grew louder and louder. "Move that bus! Move that bus! Move that bus!" It reminded Schuyler of the television show "Extreme Home Makeover."

As soon as the unit was formed, the buses drove away, and to the wild cheers of the crowd, Schuyler marched forward among the Soldiers of the platoon, the company and the battalion with whom he had experienced a year of war. The formation halted in the middle of the parade field. A senior officer from the division spoke some words welcoming them home. Schuyler scanned the crowd for his family to no avail.

The senior officer's brief comments ended with: "Families and loved ones, go get your Soldier!"

With a roar, the crowd of loved ones surged forward, merging into the formation of Soldiers. It was chaos—hugs, smiles, tears, people everywhere. Schuyler kept looking through the crowd, but he could not find his family.

"Schuyler!" It was his father's familiar voice. Schuyler turned to see his dad moving toward him. Then he saw *her.* Rushing past his dad, moving as quickly as she could through the crowd towards Schuyler, was Kristen, his wife. She collapsed into his arms, a year's worth of worry and loneliness flowing out in her tears. After a long embrace, Schuyler reunited with his parents. They looked as happy as he had ever seen them.

Then he felt a tap on his shoulder. It was one of his Soldiers.

"Sir," said his Soldier, "I really want you to meet my dad. He doesn't speak English, but I really want you to meet him."

Schuyler stretched out his hand to the man. The Soldier's dad squeezed Schuyler's hand with a firm two-handed grip. He looked directly into the eyes of his son's platoon leader, offering a wordless expression of gratitude for bringing his son home alive, breaking into tears as his son spoke.

"Sir," said the Soldier to his platoon leader, "I just want you to know, I will fight with you anytime, anywhere."

Watching all this, Kristen finally understood why her husband was so committed to serving his Soldiers. He was their platoon leader.

More stories like these will be featured in a forthcoming book on the experiences of Army platoon leaders in Iraq that is being put together by the Center for Company-level Leaders. If you are an experienced company commander or platoon leader who would like to share your experiences, engage with YOUR professional forum at CC.army.mil or PL.army.mil, or contact us directly at peter.kilner@us.army.mil.

Connecting in conversation...
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Art by Jody Harmon

Have you joined your forum?

Soldier Armed

RAID Tower Sensor Helps Force Protection Equation

By Scott R. Gourley

Along with new air and ground platform upgrades and weapon enhancements, Army warfighters have also been the beneficiaries of recent technology enhancements in a range of aerial and ground-based force protection capabilities.

One of the early examples can be found in the evolution of the rapid aerostat initial deployment (RAID) system from Raytheon, which utilizes a variety of platforms—including aerostat, tower and mast—and sensor suites to provide persistent surveillance in support of warfighter intelligence, surveillance and reconnaissance requirements.

RAID initially emerged as a tethered aerostat program, the result of Raytheon and the Army working together to find a quick, rapidly deployable force protection application.

A program overview from the U.S. Army Program Executive Office for Missiles and Space states: "In January 2003, the U.S. Army validated a requirement to enhance force protection for Coalition forces engaged in Operation Enduring Freedom. These forces were experiencing indirect fires in their area of responsibility. These fires adversely affected each unit's ability to provide adequate security for airfields and forward operating bases. The units required an enhanced capability to detect and identify threat movement at sufficient distances to enhance tactical decision making. The Joint land attack cruise missile defense elevated netted sensor system product office identified a low-cost materiel solution to fill this operational need. The first rapid aerostat initial deployment systems were fielded in March 2003."

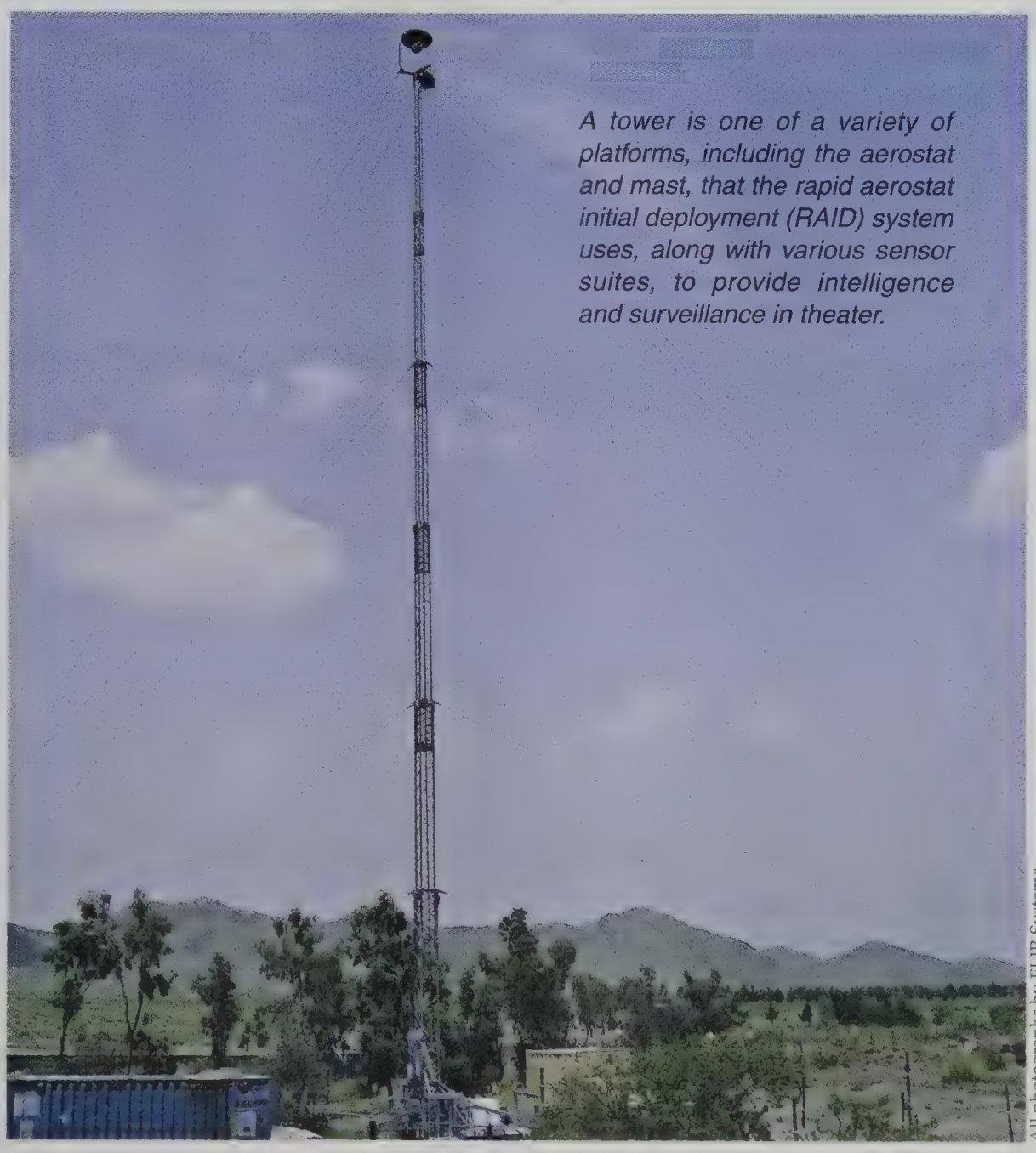
Program observers note, however, that the geographic challenges in some parts of Afghanistan precluded operations at the 1,000-foot optimum sensor height for the tethered aerostat. As a result, a secondary tower-based system was erected.

The RAID tower system provides a representative example of the force protection capabilities that have been rapidly fielded and enhanced over the last few years. The system consists of a 107-foot-high tower, electro-optical/infrared (EO/IR) sensor, map overlay software, battle command software connectivity, data link, generator and command shelter.

"That is really what has proliferated," said Peter Deutsch, director of product management (and former RAID program manager) at FLIR Systems Government Systems Division, which provides the EO/IR sensor. "There are some aerostats now in Iraq, but they have moved them all out of Afghanistan. The towers really took center stage, and they started to deploy those both in Operations Enduring Freedom and Iraqi Freedom (OEF and OIF) beginning in 2004. In the last 12 months they have ratcheted up the quantities over there quite substantially."

So substantially, in fact, that in mid-November 2008, Raytheon delivered the 300th RAID tower to the U.S. Army. Marking the occasion, company representatives noted that "Raytheon first developed RAID to respond to the U.S. military's critical need for persistent surveillance. The system is currently in wide use throughout OEF and OIF by the U.S. Army, U.S. Marine Corps and Coalition allies."

Deutsch explained that the elevated



A tower is one of a variety of platforms, including the aerostat and mast, that the rapid aerostat initial deployment (RAID) system uses, along with various sensor suites, to provide intelligence and surveillance in theater.

All photographs by FLIR Systems



FLIR Systems Star SAFIRE III is an infrared and daylight long-range camera that is stabilized and mounted atop the RAID tower.

imaging sensor on the RAID tower system is the FLIR Systems Star SAFIRE III.

"It's both an infrared and daylight long-range camera that is stabilized," he said. "It sits on the very top of the tower and has significant range. It provides soldiers with rangefinding capabilities and the ability to use 'pointers' to guide troops onto prospective targets, as well as being integrated into the various other systems they have tied into the tower: map applications, call for fire applications, things of that nature."

Deutsch noted that an "initial suite of force protection applications" sent to theater in late 2003 had featured the Star SAFIRE II sensors, but that these had been replaced by the Star SAFIRE III design in January 2004.

David Strong, vice president of marketing for FLIR Systems Government Systems Division, noted that the harsh operational environments and critical missions performed by these sensors had combined to present some technology challenges along the way.

"The technology to accomplish this mission is fairly well established in the sense that putting long-range sensors into a MIL-SPEC [military specifications] environment is something that we know how to do and have been doing for a long time," he explained. "But the interesting aspect is that when these systems started to be fielded we—and the Army—discovered that the environment is so extreme there: It is so hot, you get solar loading; you are often sitting there with little or no air flow or wind blowing, and the electronics and the sensors get extremely hot. It goes well beyond the MIL-SPECs.

"When we originally fielded these systems we were putting MIL-SPEC qualified systems into the field. And very quickly we all realized that we needed something that went beyond that."



The 107-foot-high RAID tower system was rapidly fielded to Afghanistan because the terrain there precluded operations at the 1,000-foot optimum sensor height for the tethered aerostat.

That realization led to what Strong dubbed "a crash program" in the spring of 2004 "to do some engineering, some testing and some qualification. We actually ended up taking these systems and qualifying them well beyond the military specifications for high-temperature operation.

"It's a story of cooperation between FLIR and the Army," he added.

In terms of significance to the warfighter in the field, Deutsch said: "This sensor saves lives every single day as part of the RAID application. It is critical to those warfighters. And that is the number-one reason that we do what we do to support this program: We know that we're saving lives."

In addition to sensors for the RAID towers, FLIR Systems has delivered additional sensors for a range of programs, including the U.S. Army Corps of Engineers eagle eye system, the Marine Corps ground-based operational surveillance system and the U.S. Central Command base expeditionary targeting and surveillance system-combined joint urgent operational need. ★

AUSA Sustaining Member Profile:

MGM Brakes

Corporate Structure—Founded: 1956. Chairman, President and CEO: Ron Parker. Corporate Headquarters and Technology Development Center: 8530 Cliff Cameron Dr., Charlotte, NC 28269. Manufacturing Plants: Murphy, N.C.; Cloverdale, Calif. Telephone: 704-547-7411. Web site: www.mgmbrakes.com.

MGM Brakes, a division of Indian Head Industries, was founded more than 50 years ago, when heavy, over-the-road vehicles, lacking reliable air-brake system backup devices, experienced brake failures that usually resulted in runaway vehicles—endangering drivers, fellow motorists and pedestrians.

In 1956, saw mill owner and logger Swen Gummer, along with John Miller and Joseph Meyers, came up with an innovative solution to this safety problem. They developed a chamber containing a powerful spring and piston which, when connected to the vehicle's foundation brake system, provided an emergency parking brake. Under normal operating conditions, the spring and piston were held back by air pressure, allowing the wheels to turn freely. A loss of system air pressure, however, caused the spring to release, engaging the vehicle's foundation brakes.

Whether acting as an on-the-road emergency brake or as a secure parking brake, the device achieved worldwide acceptance as a simple solution to a serious problem that had plagued the transportation industry for decades.



As the inventor and manufacturer of the industry's first truly effective spring parking brake, MGM Brakes rapidly progressed from its modest origins to industry-leader status; today its products are standard equipment on many makes of commercial vehicles manufactured all over the world. MGM Brakes continues to refine its products and develop new solutions for its customers' changing needs, offering 112 different models of spring brakes for use with wedge, S-cam and disc foundation brakes as well as the e-STROKE® electronic brake monitoring system. MGM Brakes is the owner of 110 global patents, including the "tamper resistant" spring brake design.

Before 1989, double-diaphragm spring brake actuators were manufactured using two clamp bands, one to seal the service side and one to seal the spring parking side. Originally, both sides of these units were considered serviceable—if either side failed, the clamp band could be removed, the diaphragm or other components could be replaced and the unit could continue in service as repaired.

Experience showed that all too often technicians didn't follow the required safety procedures when removing the clamp band on the spring parking side, which posed a great safety risk. If the powerful spring in the spring parking side was not properly "caged" before the clamp band was removed, the spring could propel components of the assembly with great force, potentially causing severe personal injury.

In response, MGM Brakes pioneered the development of the tamper resistant double-diaphragm spring brake actuator with the first nonserviceable spring parking side. By the early 1990s, the entire domestic industry recognized the safety enhancement offered by the tamper resistant design. Today, every spring brake manufacturer based in the United States offers *only* spring brakes utilizing tamper resistant technology, resulting in fewer injuries to workers from improper repair procedures. Accidents now have steadily declined so that today they are virtually nonexistent.

The U.S. military utilizes MGM's spring brakes both at home and abroad. MGM's piston spring brake is currently used on the Cheetah, Cougar and Buffalo MRAP vehicles as well as on the MTVR, HEMTT and the MAXXPRO. MGM Brakes also implemented snorkel technology into the piston brake specifically for military vehicle applications; this technology enables the brake to operate underwater.

MGM Brakes also offers the e-STROKE® brake monitoring system, which electronically monitors the status of the brake actuators.

One component of the brake actuator is the pushrod, which physically travels to apply the foundation brake. (The term *stroke* describes the amount of pushrod travel in inches.) The e-STROKE® system provides a real-time, accurate brake-stroke status reading via stroke sensors that are factory calibrated and installed on the pushrod. The chassis communications module (CCM) alerts the driver to brake problems via either a dashboard warning light or visual display. This technology is designed for use on any S-cam air-braked vehicle.

The e-STROKE® brake sensor transmits a signal to the CCM indicating stroke status. Each brake chamber is capable of 2.5-inch or 3-inch maximum stroke before the pushrod physically cannot travel anymore. When the brake is not properly adjusted, the stroke measurement will be within one half-inch of the maximum rated stroke—a condition referred to as overstroke. This is a serious safety concern because the brake may not have enough force to stop the vehicle promptly. To help prevent this issue from recurring, the e-STROKE® system will identify an overstroke condition so maintenance can be performed. If the brake pedal is pressed and the pushrod doesn't travel, the system indicates a nonfunctioning brake. If the brake pedal is released and the pushrod doesn't retract, the system indicates a dragging brake (dangerous because the vehicle is being driven with a brake applied), which can damage wheel-end components and even lead to brake fires. The e-STROKE® system is very valuable to a vehicle with underbody armor because it allows the driver to verify electronically the status of the brake system from inside the vehicle.

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Reviews

Mutual Assured Destruction and the Military

The Great American Gamble: Deterrence Theory and Practice from the Cold War to the Twenty-First Century. *Keith B. Payne. National Institute Press. 471 pages; index; $19.*

By James Jay Carafano

Keith Payne is not like the rest of us. When the Cold War ended, most of the military stopped worrying about how war actually worked and why it ended in the fall of a wall rather than a mushroom cloud—but not Payne. A longtime professor at Georgetown and Missouri State Universities, adviser and consultant on arms control, and president of the National Institute for Public Policy, Payne never stopped thinking about the unthinkable. Now he has captured his decades of personal experience and research in *The Great American Gamble: Deterrence Theory and Practice from the Cold War to the Twenty-First Century.* Payne concludes that many of the common lessons drawn from the experience of the decades-long nuclear standoff between Moscow and Washington are wrong. Persistent belief in outmoded and wrongheaded theories for preventing proliferation and atomic conflict may have, in Payne's words, "catastrophic consequences for U.S. society."

The Great American Gamble is essential reading. For many who have taken a decades-long time-out in thinking about nuclear confrontation and ballistic missile threats, it is long past time to get their heads back into the game. For a younger generation of Americans concerned with military affairs, who know little of the Cold War debates that tossed around words like *throw-weight, megatons, counterforce* and *counter-city,* there is a lot of learning to do. All will find no better introduction to the topic than *The Great American Gamble,* a book that must be studied by anyone involved in national security.

Payne argues that there were two central schools of thought about how to deal with the threat of nuclear war between the United States and the Soviet Union. Both believed in deterrence—preventing nuclear war by



convincing the other side that a nuclear war could not be won, thus deterring each from initiating nuclear war to begin with. One view was championed by Thomas Schelling, whom Payne cites as "the single most influential Western strategic theorist of the Cold War." Schelling argued that it was "uncertainty," the inability to determine when confrontation might escalate to nuclear conflict, that deterred the Soviets. The exposure of both sides to massive nuclear attack by the other, Schelling concluded, was actually a good thing—vulnerability made both sides more cautious. Schelling's theories were eventually codified in American military doctrine as mutual assured destruction, or MAD.

Herman Kahn pioneered the second school. Kahn argued that MAD was little more than Russian roulette—missteps or miscalculation could well lead to horrifying results. Kahn famously coined this concern as "thinking about the unthinkable," and he did much to emphasize the catastrophic consequences of thermonuclear war through his work at the RAND Corporation and later as founder of the Hudson Institute. Kahn argued that rather than making America intentionally vulnerable to an enemy first strike, the United States needed to adopt a damage-limitation strategy, demonstrating that America could, as Payne writes, "survive the execution of its nuclear escalation threat." Kahn concluded that building a credible capacity for defense would make the U.S. nuclear deterrent more credible. Schelling countered that defenses would be destabilizing, making the Soviets more, not less, aggressive. (The Soviet Union might attack out of fear that its weapons might one day be useless or build even more offensive weapons, putting the arms race in hyperdrive.)

Schelling won the argument; Kahn became a figure of ridicule. (The character Dr. Strangelove—who worked for the "Bland Corporation"—in Stanley Kubrick's 1964 film was a send-up of Kahn. This is ironic: Kubrick's film was intended to lampoon the MAD strategy, which was the brainchild of Schelling, not Kahn.)

The problem, Payne points out, is not so much who was really right during the Cold War—Schelling or Kahn—but that Schelling's assumptions have been transported into the 21st century unexamined. Indeed, Payne concludes that most classical nuclear deterrence theory does not fit well for the world in which we live now. Virtually every facet of Cold War "common sense" may be wrong. Rogue states and nonstate actors might not be deterred by the U.S. nuclear arsenal. Nascent nu-

clear nations, like North Korea, which might not understand the "rules" of Cold War-style deterrence, could blunder into nuclear war. Defenses against ballistic missiles are not only achievable, but desirable. In the world in which we live now, strategic defense might, just as Kahn predicted, make the U.S. nuclear deterrent more, not less, effective. In short, intentionally leaving the United States vulnerable to ballistic missile attack is no longer rational. Payne presses for a strategy that would protect and defend the United States against ballistic missiles and relegate MAD to the dustbin of history, along with the Soviet empire.

The military, which has not played a prominent role in nuclear strategy debates for a long time, should rejoin the discussion. The services have every reason to be interested in ballistic missile defenses, whether they are to ensure access to space and defend space-based assets, to provide fleet protection, to defeat regional threats or to protect the nation. Every branch of the armed forces has equity in the debate over the future of ballistic missile defense. *The Great American Gamble* offers some intriguing ideas for those interested in this vital subject.

JAMES JAY CARAFANO is a senior fellow at The Heritage Foundation and the author of G.I. Ingenuity: Improvisation, Technology and Winning World War II.

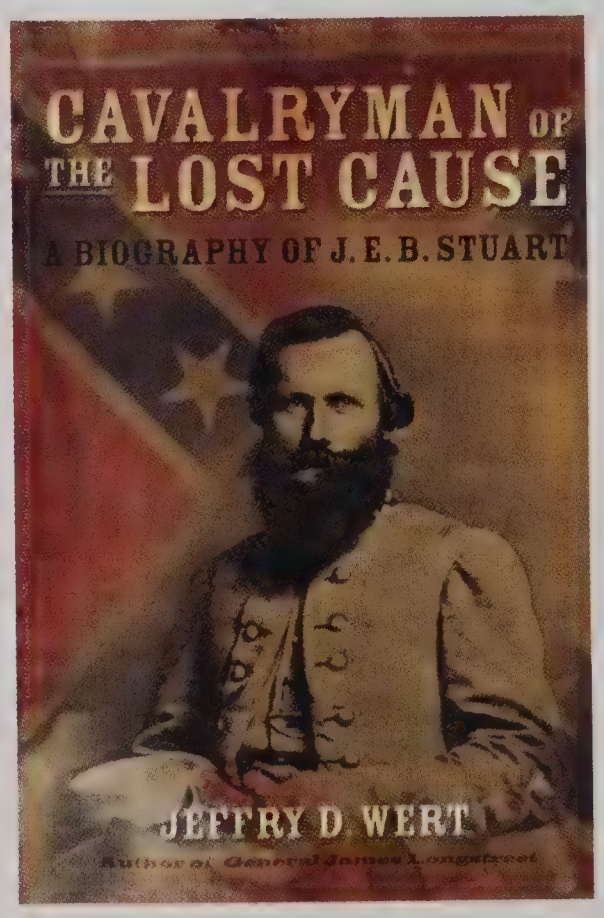
Varied Fare

Cavalryman of the Lost Cause: A Biography of J.E.B. Stuart. *Jeffry D. Wert. Simon & Schuster. 496 pages; maps; black-and-white photographs; index; $32.*

In the annals of American military history, no cavalryman occupies a higher position than Maj. Gen. J.E.B. Stuart, the preeminent horse soldier of the Confederacy. In the first full-scale biography of the enigmatic Stuart in two decades, Jeffry D. Wert integrates additional manuscript collections and biographies to present a balanced assessment of the Southern leader, whom one Northern adversary characterized as "the greatest cavalry officer ever foaled in America."

Wert is no stranger to Civil War history. His previous books have included provocative interpretations of the Union Army of the Potomac, the Shenandoah Campaign of 1864, Mosby's Rangers and the third day of the Battle of Gettysburg. *Cavalryman of the Lost Cause* now joins Wert's acclaimed biographies of Gen. George Armstrong Custer and Gen. James Longstreet, perhaps the Confederacy's most controversial soldier.

Wert's Stuart is a true son of Virginia, a devoted family man, a deeply religious person and "an unbending believer in the justness of the Confederate cause." Only 28 years old at the start of the war, Stuart became one of the South's initial heroes after circumventing Union Gen. George B. McClellan's Army of the Potomac in June 1862. He repeated the feat following the Battle of Antietam a few months later. Such raids provided limited strategic value, but they were valuable in that they inspired the Southern populace and enhanced Confederate nationalism. At Chancellorsville in May 1863, Stuart succeeded the fallen Stonewall Jackson and commanded Jackson's corps with distinction for the remainder of the battle.



Despite his battlefield success, Stuart suffered his share of detractors. His peers in the Army of Northern Virginia often viewed him as an overly ambitious officer, ever craving promotion and public acclaim. Elevated to corps command following the reorganization of Lee's army in the autumn of 1863, Stuart expected to be promoted to lieutenant general. He was gravely disappointed when Lee decided that the responsibility for commanding a cavalry corps did not equal that of an infantry corps.

Though he clearly admires Stuart, Wert provides a balanced assessment of his subject. Wert finds Stuart's "efforts wanting" in the days preceding the Battle of Antietam. At Gettysburg a year later, Stuart acted injudiciously and "committed a critical misjudgment for which he was condemned at the time and since." Without Stuart's usual detailed intelligence of enemy dispositions, Lee stumbled into the war's climactic battle without proper preparation. Justly or not, Stuart's eight-day absence during the opening days of the campaign has framed modern interpretations of the Confederate cavalryman.

In the final analysis, *Cavalryman of the Lost Cause* is a welcome addition to our understanding of one of the most remarkable soldiers this country has ever produced. Wert succeeds in bringing the controversial Stuart to life, warts and all. In doing so, he joins a long list of Stuart admirers who view the South's premier cavalry commander as an avid student of warfare, a firm disciplinarian and a realist who was far in advance of his contemporaries with respect to mounted operations.

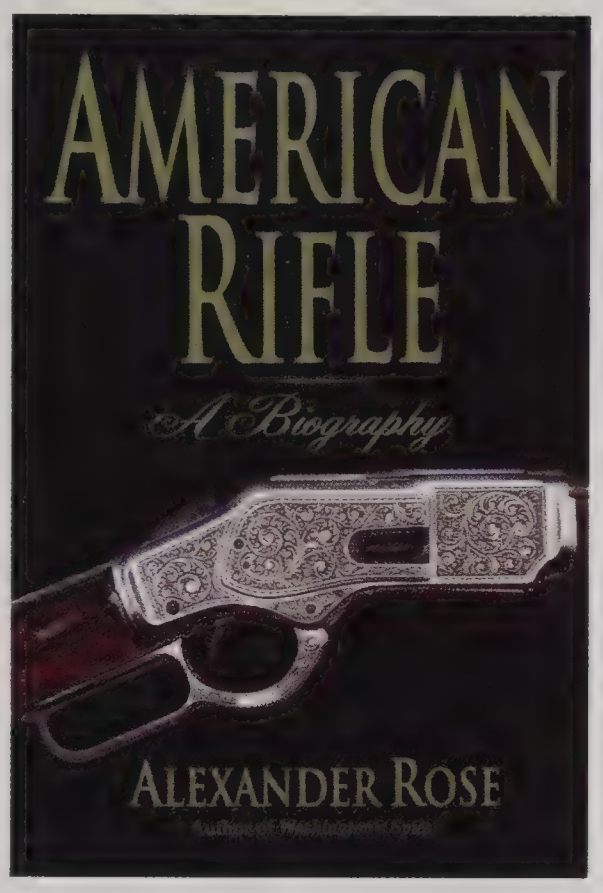
—Col. Cole C. Kingseed, USA Ret.

American Rifle: A Biography. *Alexander Rose. Delacorte Press. 512 pages; black-and-white photographs; diagrams; index; $30.*

As the subtitle suggests, *American Rifle: A Biography* by Alexander Rose traces the evolution of the rifle from the pre-Colonial period in American history to the present and beyond. The beyond is dealt with in the final chapter, entitled "The Rifle of the Future," and the reader might be surprised by Rose's insights.

One might expect charts, graphs and metrics filled with statistics on things such as muzzle velocity, caliber variances, rate of fire, grains of powder per cartridge and casualties. There is some of that—enough to keep the most technical-minded reader satisfied—but there is more than that, much more.

This is the story of the development of the rifle and its influence on American history. Perhaps a better description might be how American history influenced the development of the rifle. No matter how you phrase it, however, the rifle's symbiotic relationship with the progress of the nation cannot be overstated. The histories of the rifle



and America are intertwined to the extent that it is impossible to separate the two.

Rose introduces us to many of the key players along the way, the visionaries, entrepreneurs, bureaucrats and scoundrels and their triumphs and failures, fortunes won, fortunes lost. Visionaries and entrepreneurs include Samuel Colt, Oliver Winchester, Christian Sharps and countless others who were responsible for the improvements in the American rifle over the course of the last two-plus centuries.

All of this innovation has been in the seemingly unattainable quest to create the "perfect rifle"—unattainable because the definition of *perfect* seems consistently imprecise. Do we want our perfect rifle to be the most accurate weapon possible, or are we more concerned with a high rate of fire? Is it "one shot, one kill" or is it more "steel on the target"? And we cannot overlook the improvements in ammunition, innovations that led to smokeless powder, waterproof caps and increases in range, all of which necessitated changes in infantry tactics.

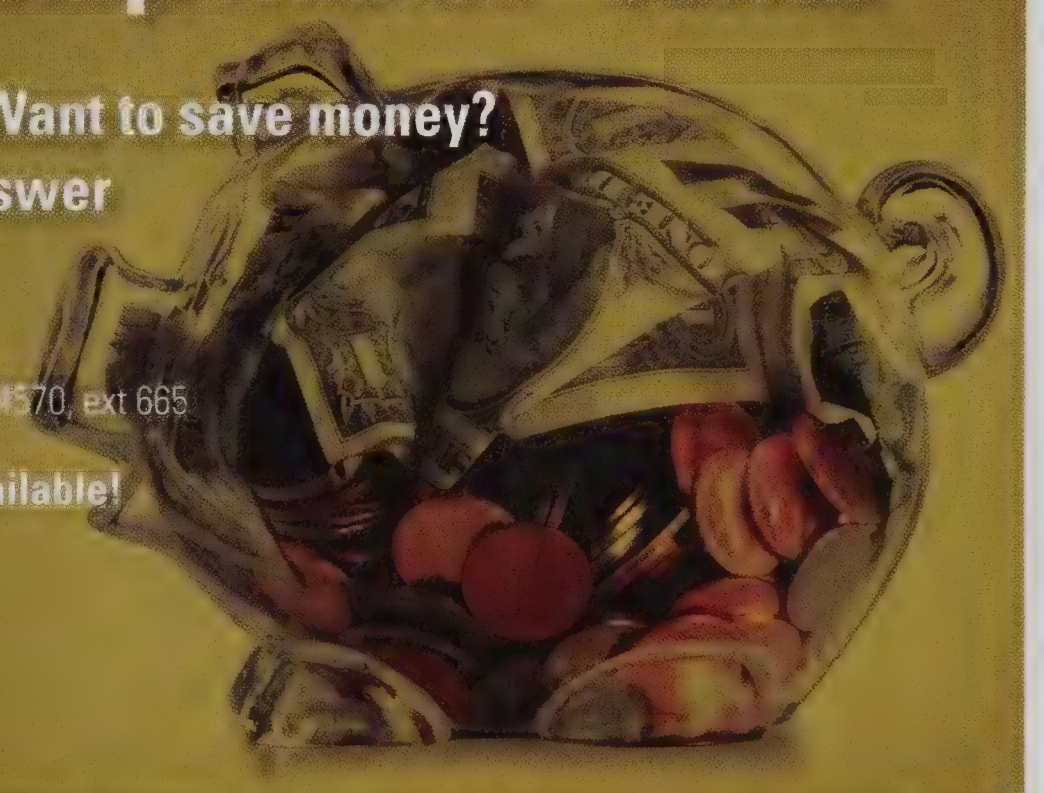
To the early Americans who lived off the land and to Infantry soldiers of every generation, the rifle was and is

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not just a tool of the trade, but an extension of their identity. To quote the Rifleman's Creed: "My rifle is my best friend. … My rifle is human, even as I, because it is my life."

American Rifle: A Biography, well written and well researched, would be an important addition to the history buff's collection. This book will be enjoyed by anyone interested in military and American history or readers simply looking for a good story—Rose whets the appetite and leaves the reader hungry for more.

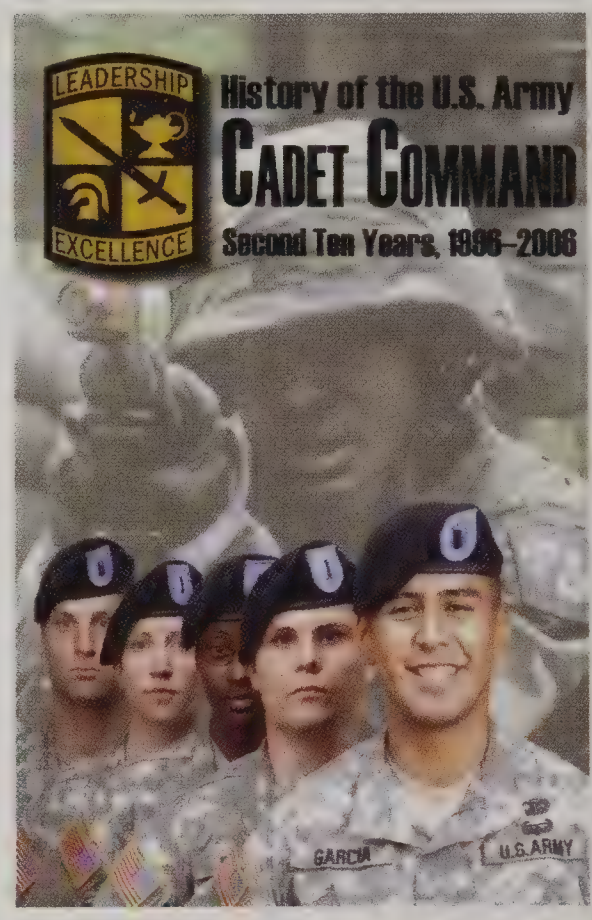
—CSM Jimmie W. Spencer, USA Ret.

Briefly Noted...

History of the U.S. Army Cadet Command: Second Ten Years, 1996–2006. *Arthur T. Coumbe, Ph.D.; Paul N. Kotakis; W. Anne Gammell. Cadet Command, U.S. Army. 414 pages; maps; charts; color photographs.*

U.S. Army Cadet Command historian Arthur T. Coumbe, along with Paul N. Kotakis and W. Anne Gammell, provide a detailed history of Cadet Command's activities during the period 1996–2006, picking up where *U.S. Army Cadet Command: The 10 Year History* ended. The book provides information on how the commissioning program operates, focusing on the internal workings of the command. The volume studies the recruiting and training of future officers, as well as how the command handled its numerous responsibilities.

Following a background chapter covering the Reserve Officers' Training Corps' (ROTC) heritage and development until 1996, the chapters continue chronologically, each covering a span of a few years. There is a chapter devoted entirely to Junior ROTC during the time frame, as well as a summary chapter. Forty-nine tables—in addition to charts, maps and color photographs—help tell the Cadet Command story. This is a must-read for anyone seeking comprehensive information about this important U.S. Army command. For a copy, contact Coumbe at arthur.coumbe@usacc.army.mil or 757-788-4608.



ARCIC/AUSA Writing Contest

The TRADOC Army Capabilities Integration Center (ARCIC) is seeking to identify, discuss and influence the outcome of significant defense issues that affect the U.S. Army. To allow for more direct participation in the public debate of defense-related issues, ARCIC and AUSA are co-sponsoring a writing contest. The submission of quality manuscripts is encouraged.

The theme is **"Capabilities Needed for the Army Future Force, 2030 & Beyond."** Papers must be original, unpublished and between 5,000 and 10,000 words, with a one-page synopsis and biography of the author. The deadline for submission is 31 May 2009. A cash prize of $1,000 will be paid to the winner, and all papers will be submitted to AUSA's Institute of Land Warfare for possible publication.

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Historically Speaking

Abraham Lincoln, Commander in Chief, at 200

By Brig. Gen. John S. Brown
U.S. Army retired

February 12th marks the 200th birthday of Abraham Lincoln. Our revered 16th President assumed office amid catastrophic civil strife, preserved the Union and died a martyr to this cause. In four years, Lincoln—more so than any single historical figure—defined Americans' conception of their Commander in Chief.

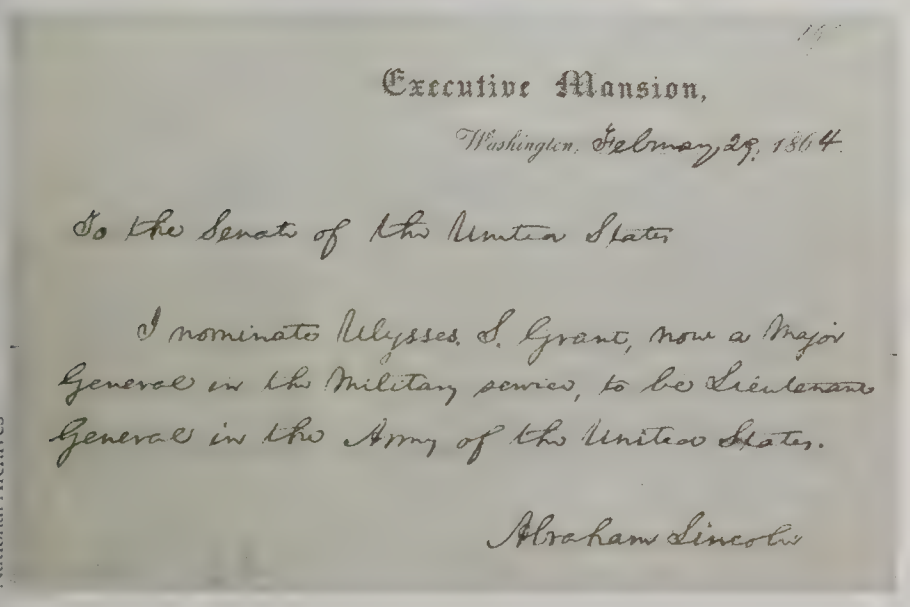
Today we expect our presidents to establish the political and moral legitimacy of force when we choose to use it, to communicate a grand strategic vision and to assert themselves in significant military decisions without displacing the professionals who must work out the details and carry them out. Military inexperience provides reason to seek wise counsel but does not diminish the Commander in Chief's responsibility to fulfill these functions. Lincoln's sole military experience, in the Black Hawk War of 1832, was fleeting and superficial, yet he rose to the tasks required in far more dangerous circumstances 30 years later.

Lincoln called upon his countrymen to fight to preserve the Union. All else was subordinate to this single and singularly defined purpose. Earlier and more thoroughly than most of his generals, he recognized that this effort required total war. Southern leaders, with considerable justification, believed further participation in the Union imperiled a social and economic order they cherished. Their decision to secede was irreversible. Lincoln wisely let them strike the first obvious blow—at Fort Sumter, S.C., in April 1861—before mobilizing the outraged nation that remained. Meanwhile, he had been urgently negotiating within the borderline slave states of Delaware, Maryland, Missouri and Kentucky to keep them in the Union.

When war broke out, Lincoln suspended *habeas corpus* and summarily swept 18,000 secessionists within those states into captivity, tipping a political balance that kept them in the Union. This extraordinary act was later repudiated in the court case *ex parte Merryman,* after the intended effect had already been achieved. In a speech before Congress, Lincoln justified his actions, asking, "Are all the laws, but one, to go unexecuted, and the government itself go to pieces?" Congress subsequently empowered the suspension of *habeas corpus,* as *ex parte Merryman* required.



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Executive Mansion,

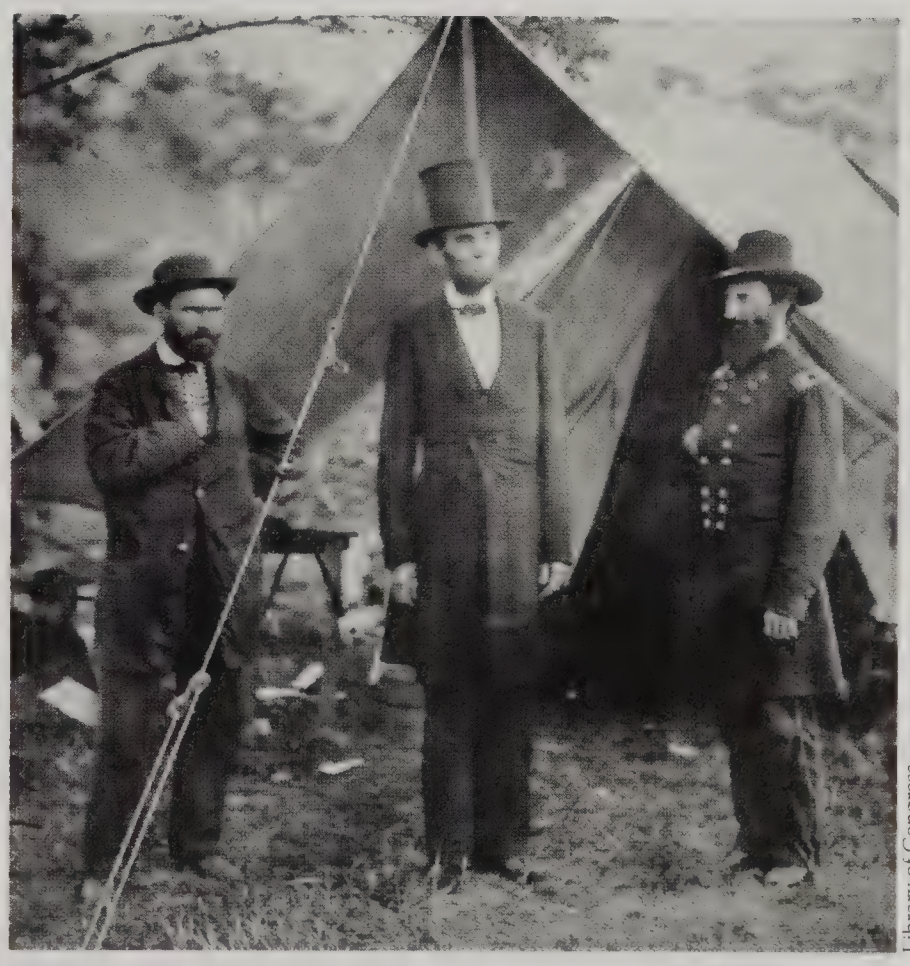
Washington, February 29, 1864.

To the Senate of the United States

I nominate Ulysses S. Grant, now a Major General in the Military service, to be Lieutenant General in the Army of the United States.

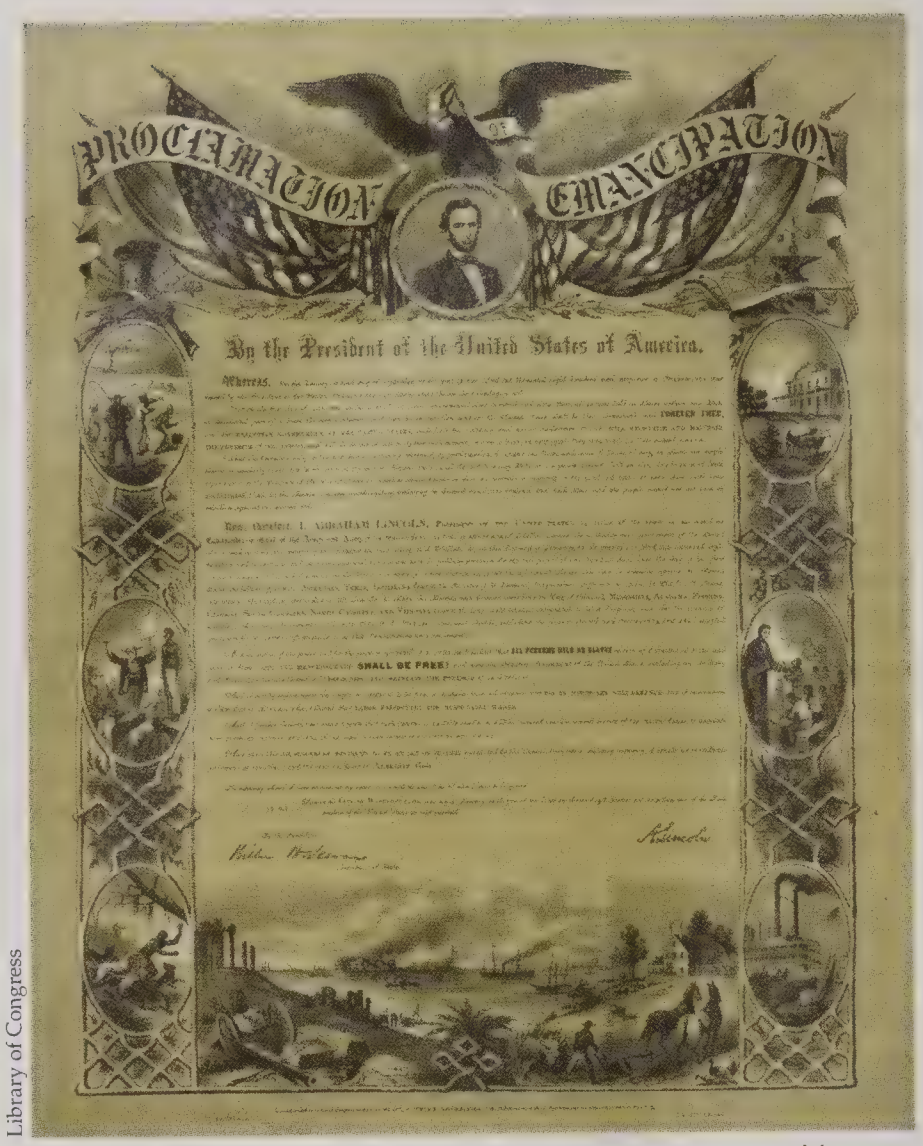
Abraham Lincoln

National Archives



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Above left, Currier and Ives immortalized the bombardment of Fort Sumter in Charleston Harbor that began the Civil War. Left, President Abraham Lincoln nominated Ulysses S. Grant lieutenant general in the Army of the United States. Above, Lincoln meets with Allan Pinkerton (left), head of Union Intelligence Services, and Maj. Gen. John A. McClernand after the Battle of Antietam in October 1862.



Library of Congress

A copy of Lincoln's Emancipation Proclamation combines his portrait at the top with a border of historical vignettes.

Slavery was important to Lincoln personally, but subordinate as a war aim. His Emancipation Proclamation of September 1862 freed slaves in states in rebellion, not in those that remained loyal. In effect this was economic warfare, encouraging slaves to flee and to cooperate with invading Union armies, undermining the Confederate economy. Lincoln did not shrink from more drastic forms of economic warfare. The devastation inflicted during Sherman's March to the Sea through Georgia in 1864 was in accord with Lincoln's authorization to his generals to target Confederate infrastructure. As costs and battlefield losses mounted, Lincoln affirmed the national purpose and steeled his countrymen for losses yet to come. His iconic 1863 "Gettysburg Address" provides a classic example of establishing political and moral legitimacy. The stakes were no less than ensuring that "government of the people, by the people, for the people, shall not perish from the earth."

In addition to defining the reason to fight, Lincoln developed and communicated a grand strategic vision. Too many of his generals sought to strike a decisive blow in a grand Napoleonic battle. Unfortunately for them, Confederate generals such as Robert E. Lee and Thomas J. (Stonewall) Jackson proved considerably more capable in grand Napoleonic maneuver. Lincoln recognized early on that the Confederacy was a major power of continental scope, that it was unlikely to succumb in a single battle, and that the full manpower and industrial might of the Union would have to be brought to bear to defeat it. Even prior to the embarrassing July 1861 debacle at Bull Run, Va., when many Northerners banked on the quick success of 75,000 militiamen called up for three months, Lincoln sought congressional authorization for 400,000 three-year volunteers. Congress approved 500,000, and in the days after Bull Run authorized 500,000 more. Lincoln's determination that the government should "avoid receiving troops faster than it can provide for them" was as prescient as his appreciation of the manpower required.

Economic and industrial mobilizations were key features of his war plans and his personal efforts. He established a major arsenal at Rock Island, Ill., to bring logistical wherewithal to the western theater comparable to that provided by Springfield, Mass., in the East. The nation's first income tax and elevated tariffs dramatically increased government revenues. The Legal Tender Act of 1862 introduced paper currency and greater liquidity. National Banking Acts reinforced federal control of the financial system. Railway Acts subsidized a transportation network upon which the economy depended. The Treasury Department assumed direct control of the cotton trade in the occupied South, profiting from lands lost to the Confederacy.

Having mobilized such massive resources, Lincoln was determined to attack the Confederacy on a broad front along multiple axes. His thinking transcended the tactical battlefield, anticipating what we now call the operational level of war. It took some time to find military leadership capable of this grander vision. Interestingly enough, when he elevated Ulysses S. Grant to be general in chief, he retained George G. Meade in command of the Army of the Potomac, a narrower task to which this more traditional professional was well suited. Lincoln proved capable of sacking and shuffling generals until he assembled a command team capable of the grand strategy he envisioned.

Lincoln was hands-on in military deliberations, keeping in touch with developments via layers of advisers and the innovation of the telegraph. He characteristically deferred to his generals in matters of detail, but nagged some into compliance and removed others when circumstances or the spirit moved him. His recurrent interest in military affairs moved George B. McClellan to lament the "browsing President," but the talented amateur occasionally picked up on insights professionals had slighted. A case in point was Lincoln's imposition of a corps level of command upon the Army of the Potomac over McClellan's objections that the division was a better capstone. In imposing the corps, Lincoln reinforced the nascent operational level of war he envisioned.

In 1863, General Order Number 100—promulgated over the objection of many professionals after exhaustive legal

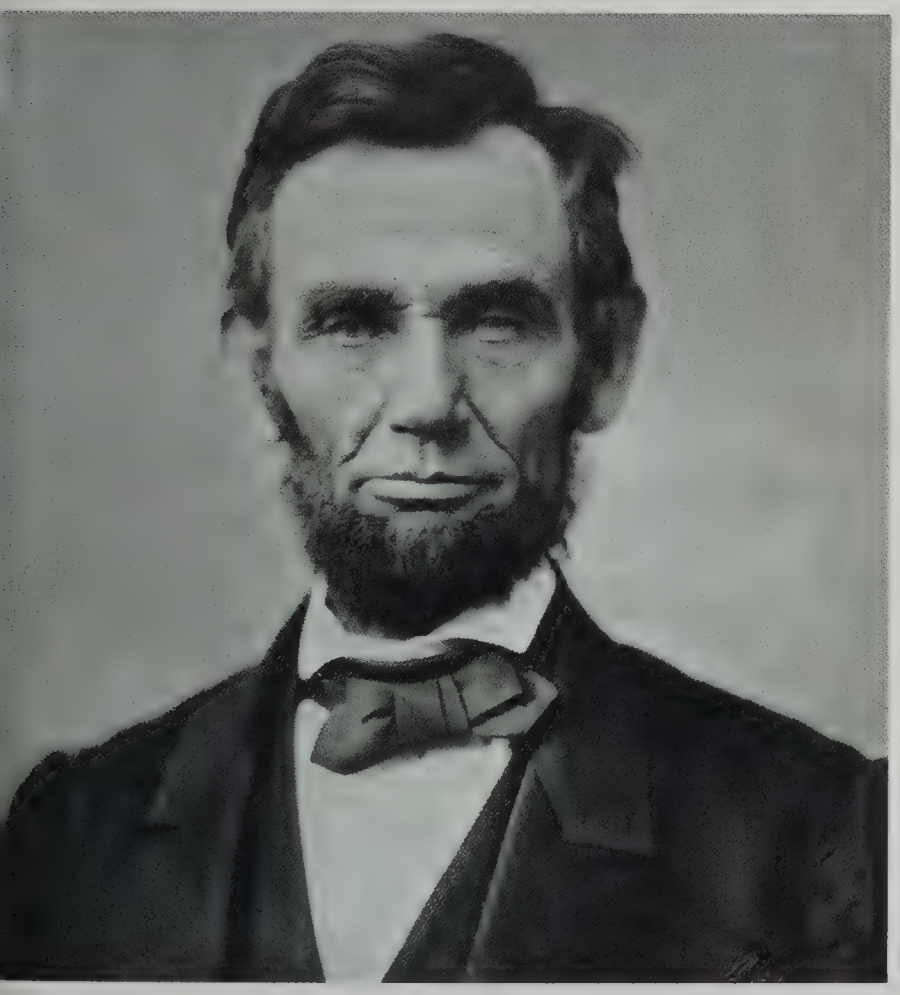
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BRIG. GEN. JOHN S. BROWN, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University.



President Lincoln meets with his generals after the Battle of Antietam.

deliberations—foresaw the holistic nature of modern war. It provided guidance for military government, occupation responsibilities, partisan warfare, civil unrest and a host of other contingencies that traditional military thinking regarded as messy and peripheral. Lincoln also recognized the contributions black soldiers could make to the Union cause and overrode the prejudices of the era to support raising and deploying the United States Colored Troops. Ultimately these numbered more than 186,000 men, an invaluable augmentation to the Union Army.



Abraham Lincoln sat for a formal portrait on November 8, 1863, about two weeks before delivering his Gettysburg Address in Pennsylvania.

Lincoln's instincts were not flawless in all things military. For political reasons—patronage—he continued to support state habits of raising new regiments rather than providing replacements to existing ones. The result was a recurrent bloodying of green regiments while seasoned regiments withered. Provisions for conscription, substitution and commutation also proved more politically feasible than fair, popular or effective. On balance, however, Lincoln's involvement in military deliberations was a decided plus for the war effort. He galvanized innovative thinking, implemented valuable initiatives, constructed a war machine of unprecedented potential and provided presidential leadership to winning teams of military and political leaders.

We are generations removed from Abraham Lincoln's struggle to reunite his country "with malice towards none, with charity for all, with firmness in the right, as God gives us to see the right." His model as Commander in Chief remains remarkably current, however. The range and scope of American power has multiplied many times over, but our military expectations of the President remain much the same. He must lead us into wars that are just, envision a feasible path to success and involve himself enough in military deliberations to ensure that they are of the highest caliber. ★

Recommended Reading:

Donald, David Herbert, *Why the North Won the Civil War* (Baton Rouge: Louisiana State University Press, 1960)

McPherson, James M., *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988)

Perret, Geoffrey, *Lincoln's War: The Untold Story of America's Greatest President as Commander in Chief* (New York: Random House, 2004)

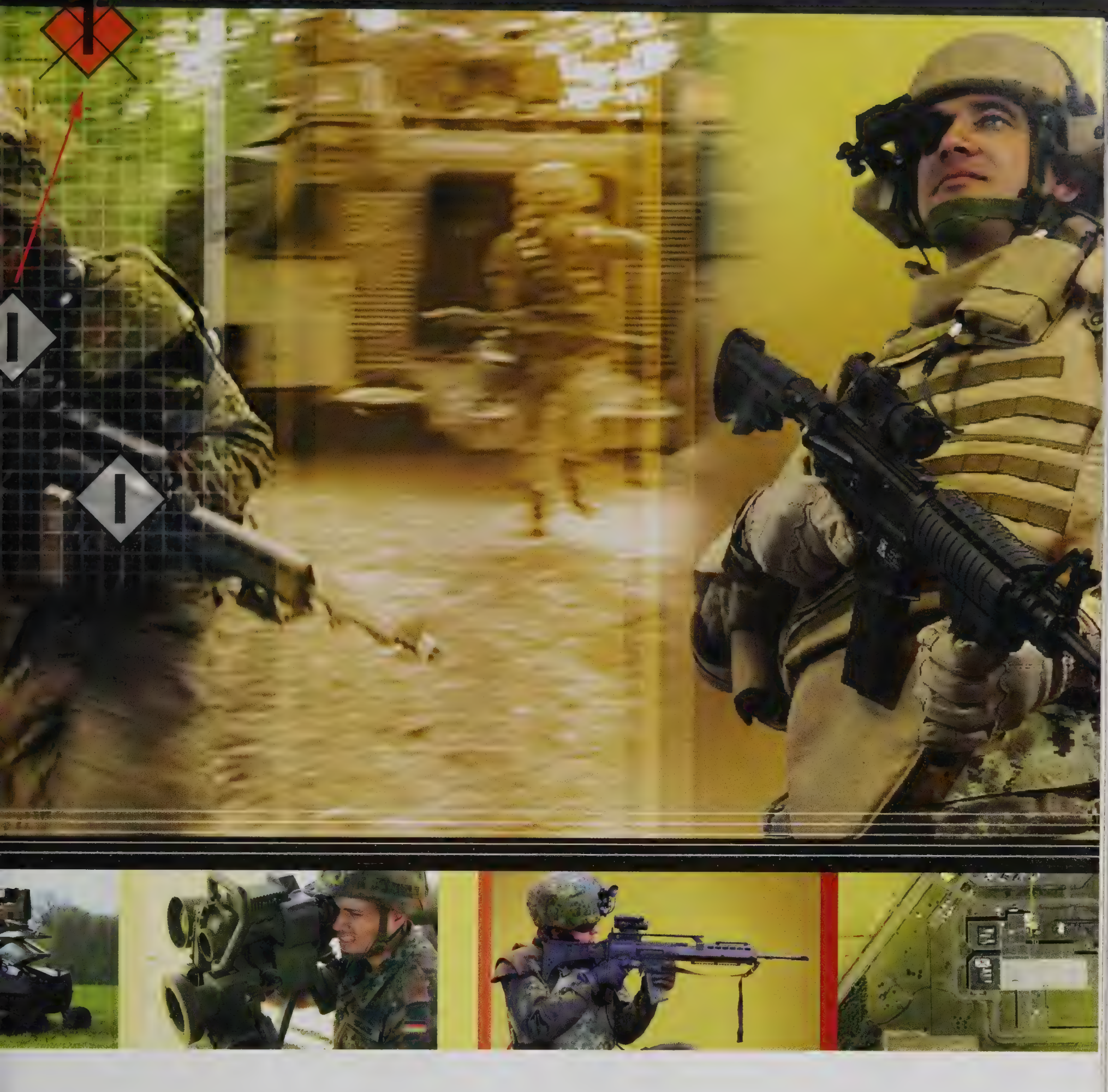
Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we cannot dedicate—we cannot consecrate—we cannot hallow—this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain—that this nation, under God, shall have a new birth of freedom—and that government of the people, by the people, for the people, shall not perish from the earth.

—Abraham Lincoln

November 19, 1863



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FRONT & CENTER

Evolving War Imperatives *By Gen. Frederick J. Kroesen, USA Ret.* ***Page 14***

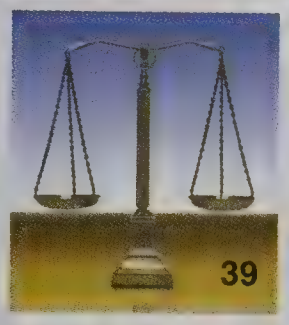
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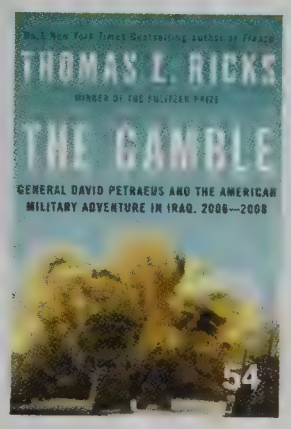
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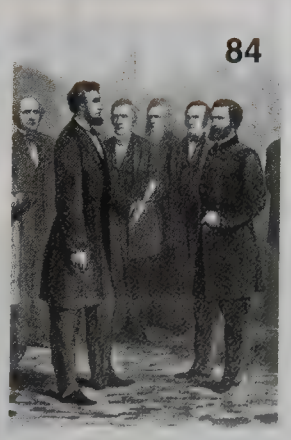














Afghanistan: America's Main Effort Redux *By Dennis Steele*
Once again, Operation Enduring Freedom is the main U.S. combat effort, but rising violence, a resurgent Taliban, increased border hostilities, a thriving drug trade and the tribal population's fierce independence challenge the Army's mission there. ***Page 24***

Transformation? Or Reclamation?—Organizing to Win the War We Have and Those We May Have Yet to Fight *By Col. Gregory Fontenot, USA Ret., and Col. Kevin Benson, USA Ret.*
Today's ambiguous environment requires a balanced U.S. security strategy implemented by well trained, well led and adaptable general forces. ***Page 39***

The Evolution of the Materiel Enterprise: Achieving Institutional Adaptation
By Gen. Ann E. Dunwoody
Today's Army Materiel Command, with an enterprise approach that weighs costs versus benefits, sustains the Army throughout the world and is evolving to meet its future needs as it rebalances and transforms. ***Page 46***

A Light in Ramadi *By Thomas E. Ricks*
An excerpt from the author's recent book, *The Gamble,* focuses on a turnaround campaign that became the "link between the first successful large-scale U.S. counterinsurgency campaign in Iraq, in Tall Afar in 2005, and the 'surge' counteroffensive in Baghdad in 2007." ***Page 54***

The Dawn of the Manned Ground Vehicle *By Sam Tricomo and Paul D. Mehney*
The eight manned ground vehicle (MGV) variants of the Future Combat Systems will deliver the full future network down to squad and platoon levels, allowing soldiers to arrive in theater fully prepared for battlefield-specific missions. ***Page 70***

Precision Fires *By Scott R. Gourley*
The precision fires being delivered in theater today are being evaluated for a variety of enhancements that will guarantee their continued contributions in support of tomorrow's warfighters. ***Page 79***

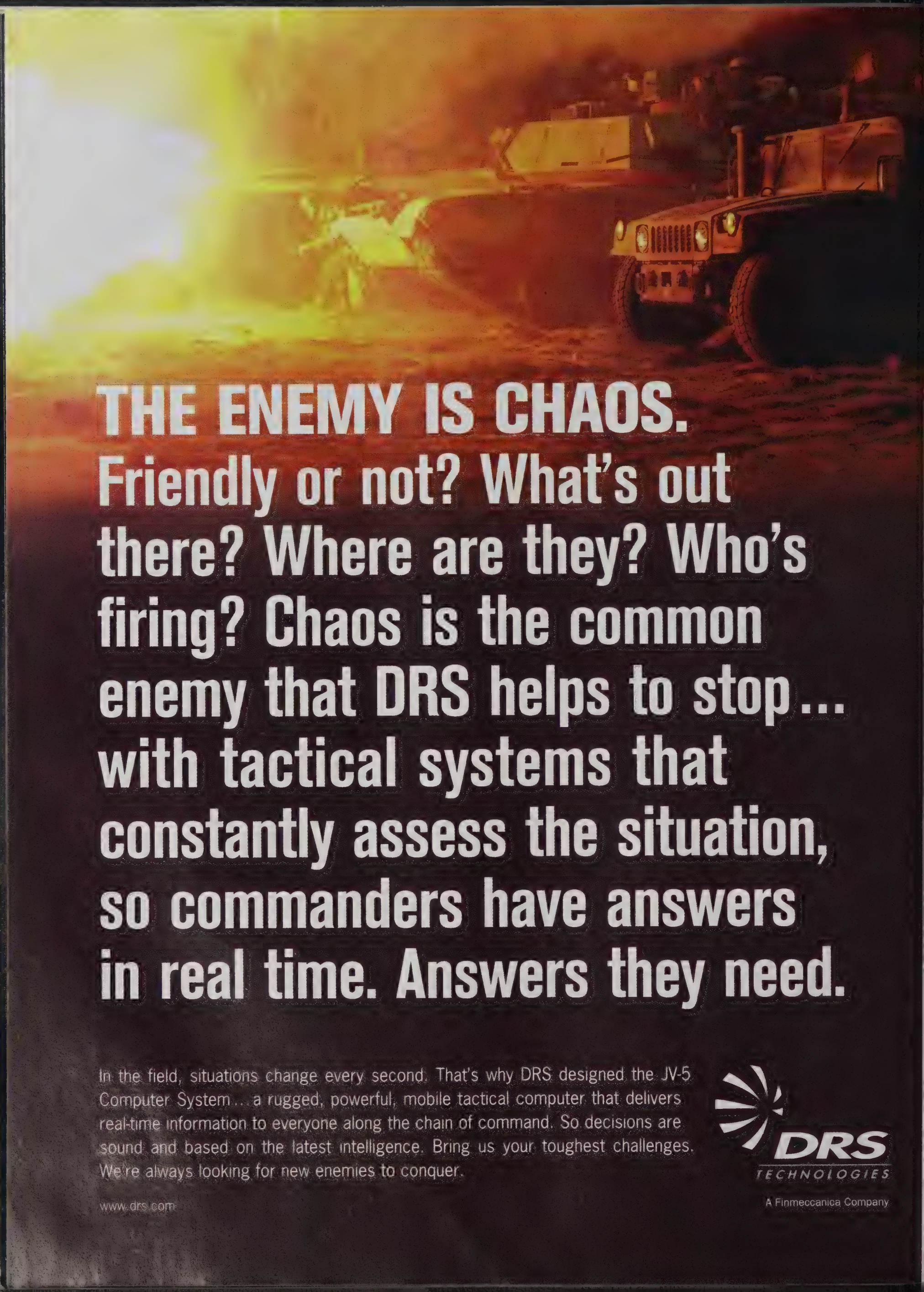
Lincoln and the Army: A Model Civil-Military Partnership
By Col. Cole C. Kingseed, USA Ret.
Commander in Chief Abraham Lincoln and Gen. Ulysses S. Grant shared a strategic vision and a mutual respect for each other's abilities. ***Page 84***

First Person: Home Sweet Home *By Ben Stein*
The author describes Washington, his hometown, with affection and respect, noting that the men and women in the military are the "heart of Washington." He says the twin hubs of Washington are "Walter Reed Army Medical Center and Arlington National Cemetery. That's where you see the real Washingtonians, in the sense that they pattern their lives after the life of Washington, father of the nation." ***Page 95***

CompanyCommand—Building Combat-Ready Teams: Leadership and Laptops on Combat Deployments
Company commanders consider the demands and value of computer-generated reporting, how it can monopolize platoon leaders' time and diminish their effectiveness, and suggest ways to complete paperwork while releasing them from their laptops. ***Page 100***

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Letters

Procurement Challenges

■ Richard Hart Sinnreich's typically logical and readable February "Front & Center" article, "Rebuilding America's Eroding Defense Industrial Base," hits many of the problems facing the technical production side of procurement.

Another significant problem relates to the increasing complexity of required new military materiel. Many years ago, I twisted a common phrase, concluding that "*invention* is the mother of *necessity*." That was based on witnessing the successful "sales pitch" approach of some defense industry marketeers who would wow the brass with a new, advanced, high-tech, faster, more lethal and so on proposal for new equipment (the invention side). Naturally, the brass had to have those exotic improvements (the need side). In addition, during the development of requirement documentation, the staff demanded add-on features that further complicated the "improved" design. The result was and is that the "need" for very high-tech, complex equipment tends to limit the pool of defense contractors to those with enough capital facilities and people with the breadth of capabilities needed to produce the now-required item of equipment.

We have overspecified and demanded difficult-to-produce hardware, and smaller-to-moderate-sized defense industries simply haven't been able to afford to maintain or gear up to build what we've asked for. Those less capable companies have either gone out of business, merged with the big guys or refrained from bidding on programs that they can't produce. So we've arrived at a point of almost sole-source production capability for some classes of materiel.

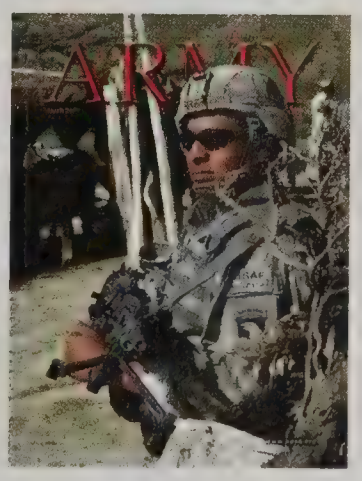
The solutions are both economical infusion, which is implicit in Sinnreich's article, and realistic requirements processes. We need to do both, and each is difficult to accomplish.

COL. ROGER MICKELSON, USA RET.
Albuquerque, N.M.

Tactical Superiority

■ Lt. Col. Joseph Doty and Maj. Shawn Tenace's excellent January 2009 ARMY Magazine article—"What Goes on in Theater Stays in Theater?"—makes some critical observations, but an early assertion that we must qualify. They write, "There is little argument that our current military force is more experienced, combat hardened, mentally agile, flexible, stronger, and technologically and tactically superior to any potential adversary." They go on to write, "Our leaders are becoming more confident and agile, but those gains cannot come at the cost of being humble." Actually, I'd argue—and hope that there is a great deal of argument—that we're seeing some pretty combat-

This Month's Cover



PFC Ariel Mora, a squad automatic weapon gunner in the 2nd Battalion, 506th Infantry/506th Regimental Combat Team (RCT), 101st Airborne Division (Air Assault), watches the perimeter as his unit checks a village in Afghanistan. The 506th RCT was part of the 101st Airborne-led Combined Joint Task Force-101 and is now returning to Fort Campbell, Ky., from duty with NATO's International Security Assistance Force (ISAF). The United States plans to nearly double its troop commitment to ISAF this year as the Obama administration shifts priority to Operation Enduring Freedom in Afghanistan. An additional four brigade combat teams (BCTs), along with support and combat enhancement units, are slated to be in Afghanistan by the end of the summer. One BCT from the 10th Mountain Division (Light Infantry), Fort Drum, N.Y., arrived in February. The story on Afghanistan's reemergence as America's main effort begins on page 24. *(Cover photograph by Paul Avallone)*

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited for reasons of style, accuracy or space limitations. Letters should be typewritten and double-spaced. All letters must include the writer's full name, address and home telephone number. The volume of letters we receive makes individual acknowledgment impossible. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via e-mail to armymag@ausa.org.

hardened and tactically superior soldiers and officers among the ranks of our Afghan partners in Operation Enduring Freedom, at least, and we cannot be so shortsighted as to think that our Afghan partners (or Taliban, insurgent and terrorist adversaries) are necessarily less mentally agile, flexible, battle hardened or tactically superior *in their own environments* where it matters.

Believing that, somehow, we are superior in every way as the observation suggests—that we know more about fighting the hard fight in the enemy's own territory—risks leadership that believes itself invincible, infallible and characterized by anything but the humility necessary to interact productively and effectively with those who have, in fact, significantly more combat experience than most of us. This has been their life for decades, on their own ground, and they certainly understand the mentality of the enemy better than we do.

From experience, I assure you that we can learn a tremendous amount from our perhaps not so technologically advanced counterparts in the Afghan army, and we must truly believe that we can learn from them. Patronizing, hollow gestures are quickly transparent and, understandably, insulting and detrimental to any progress we have made building relationships and operating as we must: as trusted partners who can help facilitate an Afghan solution to Afghan problems. Certainly, this was a rather minute piece of a larger, masterful essay, but I worry that it betrays a perspective that plagues many of our soldiers. We have to make sure that every young officer and noncommissioned officer is instilled with genuine humility along these lines and is looking to these partners to learn everything he or she can.

LT. COL. EDWARD C. LEDFORD
Director, Department of Aviation Systems Training
U.S. Army Aviation Logistics School
Fort Eustis, Va.



"Ragnar is struggling with the concept. Explain *weekend warrior* to him again."



U.S. Army

Lt. Gen. Harry W.O. Kinnard

Lt. Gen. Harry Kinnard

■ The death of Lt. Gen. Harry W.O. Kinnard, U.S. Army retired, on January 5, revived memories of that great soldier. As an ardent student of military history, I had placed him high on my list of soldiers to emulate. I never considered that I would have the opportunity to meet him.

In September 1965, the 1st Brigade, 101st Airborne Division, was sent to An Khe, Republic of Vietnam, to secure the area for the newly deployed 1st Cavalry Division. My rifle platoon in Company B, 1/327th Infantry, was pulled out of the field to serve as the honor guard for Gen. Kinnard's arrival. He was 50 then and the best-looking soldier I had ever seen. Following the ceremony, Gen. Kinnard tapped the patch on his right shoulder and said to me: "I earned the Screaming Eagle on another battlefield. I know it will always mean as much to you as it has to me." My spirits soared.

In 1968, I returned to the 101st proudly wearing the Screaming Eagle on both shoulders. In the spring of 1969 my rifle company, Company D 2/506th Infantry, was detailed to secure Fire Support Base Bastogne, wes of Hue. It was a sprawling fire base with several artillery batteries. Bu

something was missing. I had my company arrange sandbags on the landing pad to spell out in big letters "NUTS!" [Gen. Kinnard had inspired Gen. Anthony McAuliffe's storied "nuts" retort to a German demand for surrender in the Belgian town of Bastogne during World War II.]

PATRICK H. GRAVES JR.
Huntsville, Ala.

Leadership

■ I noted at the end of the exceptionally cogent February "Front & Center" article "Leadership Versus Information Technology Management—Where Do We Go From Here?" by Lt. Col. Joseph Doty and Maj. T.J. O'Connor the caveat that "the views expressed here are those of the authors and do not purport to reflect the position of the U.S. Military Academy, the Department of the Army or the Department of Defense." What Doty and O'Connor say may not be popular in some circles, but that does not mean it doesn't need saying or that it isn't right on target. The points made by the authors are valid, timely and need to be taken seriously. I would hope the authors' views would also reflect the views of every leader of every service and every agency, including the Military Academy, DA and DoD.

MAJ. GEN. GUY S. MELOY, USA RET.
Georgetown, Texas

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Washington Report

Secretary Gates Outlines Army's Challenges

In late January, Secretary of Defense Robert M. Gates provided the House and Senate Armed Services Committees with an overview of the challenges facing the Department of Defense as the new administration entered office. The greatest military challenge right now, he said, is Afghanistan, where the United States has lacked sufficient troops to provide a baseline of security in some areas. Two additional brigade combat teams will deploy to Afghanistan in late spring and a potential third one by midsummer, but according to Secretary Gates, the fight there will be a "long slog, and frankly, my view is that we need to be very careful about the nature of [our] goals." They should be "modest" and "realistic," and Afghan security forces must take the lead, he told the committees.

"My worry is that the Afghans come to see us as part of their problem, rather than part of their solution, and then we are lost," Secretary Gates said in a question-and-answer session following his testimony. Civilian casualties have hurt progress in Afghanistan, he noted, and when it comes to strategic communications, our adversaries are far more agile than the United States. "The instant we believe there may have been civilian casualties, we have to be out there" voicing regret and be "faster than the Taliban in characterizing those incidents," he said. The Secretary sees the United States' primary goal as keeping Afghanistan from being used as a base for terrorists and extremists who would harm the United States or its allies.

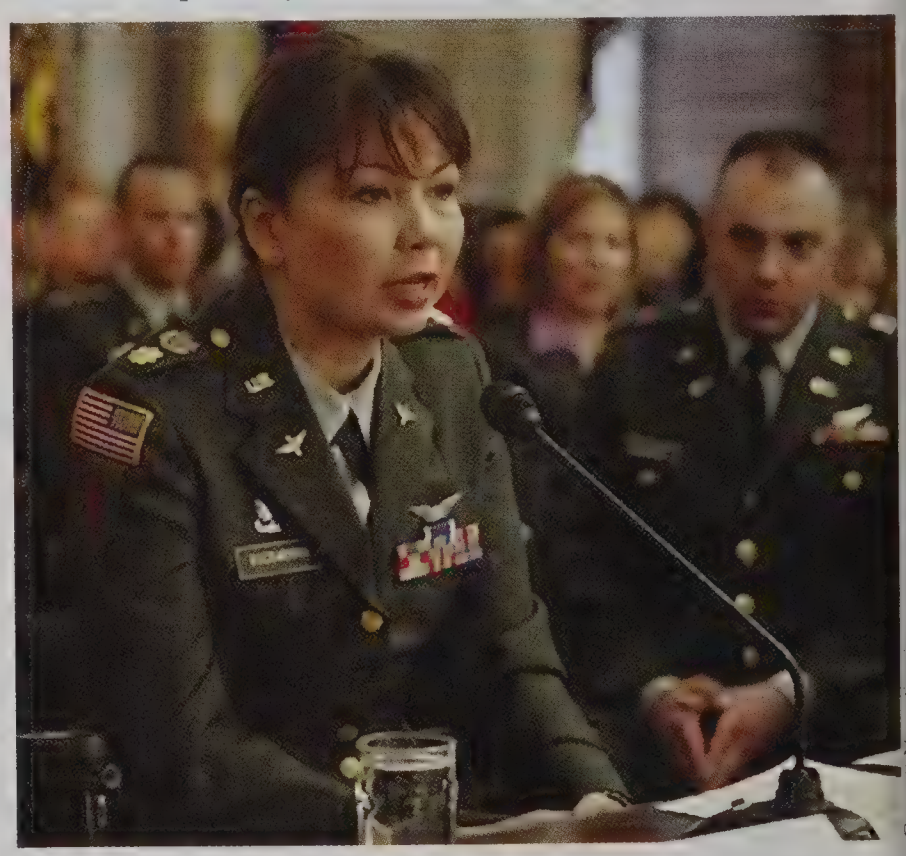
Secretary Gates warned that "the spigot of defense spending that opened on 9/11 is closing." He advised that the fiscal year 2010 budget must make "hard choices, [and] any necessary changes should avoid across-the-board adjustments, which inefficiently extend all programs." Secretary Gates said that his priority in the current financial climate will be to reform the Pentagon's cumbersome acquisition process and "pursue greater quantities of systems that represent the '75 percent' solution" and can be fielded in weeks or months and "smaller quantities of '99 percent,' exquisite systems" that take years. Secretary Gates said DoD should look for systems that have the most flexibility across a broad range of conflicts. Regarding budget cuts, nothing is off the table; Future Combat Systems and every other major program will be reviewed.

In his testimony to the Senate Armed Services Committee, Secretary Gates gave a specific timeline for increasing dwell time. The 15-month deployments begun in 2007 with 12 months at home will change: By October 2009, brigade combat teams should get 15 months at home for every 12 months deployed. By the same time in 2010, a one-year deployment will be followed by two years dwell time, and by fiscal year 2011 dwell time will increase to 30 months.

Obama Taps ARNG Maj. Duckworth. President Barack Obama nominated Illinois National Guard Maj. Ladda (Tammy) Duckworth as the assistant secretary of public and intergovernmental affairs for the Department of Veterans Affairs in February. Maj. Duckworth has been director of the Illinois Department of Veterans Affairs since November 2006.

As an assistant secretary for the VA, Maj. Duckworth will direct public affairs, internal communications and intergovernmental relations. She will also oversee programs for homeless veterans, consumer affairs and special rehabilitative events. In a White House press release, Secretary of Veterans Affairs Eric K. Shinseki said: "Effective communications with veterans and VA's stakeholders is key to improving our services and ensuring veterans receive the benefits they deserve. Tammy Duckworth brings significant talent, leadership and personal experience to this important work."

Deployed to Operation Iraqi Freedom as a captain, she was assistant operations officer for a 500-soldier aviation task force. She also served as a logistics officer and company commander. On November 12, 2004, Maj. Duckworth lost both her legs when the UH-60 Black Hawk helicopter she was copiloting was struck by a rocket-propelled gre-



President Obama has nominated National Guard Maj. Tammy Duckworth, director of the Illinois Department of Veterans Affairs, to be an assistant secretary in the Department of Veterans Affairs. Shown here testifying before the Senate Veterans Committee in 2006, she lost both legs in Iraq when a helicopter she was piloting was hit by a rocket-propelled grenade.

nade fired by Iraqi insurgents. The grenade penetrated the helicopter beneath her feet and exploded at her knees. She broke her right arm in three places in the landing, losing partial use of it.

Awarded a Purple Heart, Air Medal and Army Commendation Medal, Maj. Duckworth underwent treatment and rehabilitation at Walter Reed Army Medical Center, where she was fitted with prosthetic legs and promoted to major. She is a graduate of the University of Hawaii and received a master of arts in international affairs from George Washington University, Washington, D.C. In 1990, she joined ROTC while she was in graduate school. She became a commissioned officer in the U.S. Army Reserve in 1992 and chose aviation as her career field because it was one of the two combat fields open to women.

Gen. Casey Addresses Army's Future. At a breakfast near Washington, D.C., hosted by the Association of the U.S. Army's Institute of Land Warfare in January, Army Chief of Staff Gen. George W. Casey Jr. described how the Army will restore balance and prepare itself for the future. He noted that 2009 and 2010 will be difficult years, with deployments expected to rise. That increase, he said, will not slow the Army's efforts to eventually allow two years at home between assignments, as dwell time is expected to increase gradually.

Gen. Casey cited several steps the Army must take.

- Add new soldiers and add to the force structure.
- Reduce deployment times while increasing dwell time so soldiers can regroup as well as train and equip properly.
- Complete a modular reorganization and rebalancing of skills.
- Complete the restationing begun with Base Realignment and Closure in 2005.
- Complete the implementation of the Army force generation model so that the Army operates on a rotational cycle.

The Army of the 21st century, Gen. Casey said, should be versatile, expeditionary, agile, lethal, sustainable and interoperable.

Suicide Study and Prevention

The Army's suicide rate has increased for four consecutive years. In February, testifying before the House Appropriations subcommittee on military construction and veterans affairs, SMA Kenneth Preston attributed the rise in suicides to increased stress imposed on the force by two high-tempo wars.

In response to this high and rising suicide rate, the Army is running servicewide training through March 15 to help identify soldiers at risk. Commanders are spending two to four hours each day teaching soldiers to recognize behaviors that may lead to suicide and how to intervene to prevent it at the peer level. A chain-teaching program will follow, focusing on suicide prevention at all levels.



News Call

'Warrior-Farmers' Serve in Afghanistan

National Guard soldiers with farming backgrounds are deploying to Afghanistan to teach and mentor local farmers as part of a pilot program spearheaded by Army National Guard Director Lt. Gen. Clyde A. Vaughn. When Gen. Vaughn, a native of Missouri, returned from a trip to Afghanistan in 2007, he approached the Missouri Farm Bureau with the idea of sending National Guard farmers, agribusiness people and experts in various facets of agriculture to work side by side with Afghan farmers to help them build a sustainable farming base. The Guard solicited help from colleges and universities that have agriculture programs and determined how to organize and develop the teams of warrior-farmers.



U.S. Navy/ Lt. j.g. James Dietle

Konar Provincial Reconstruction Team members, with U.S. Department of Agriculture workers, take bulk density soil samples in Marawara District, Afghanistan.

About 85 percent of Afghanistan's population is involved—directly or indirectly—with the agricultural business, and agriculture accounts for nearly half the country's gross domestic product. The first agriculture development team (ADT), composed entirely of Missouri National Guard soldiers, deployed to Nangarhar Province in eastern Afghanistan. Among other innovations, they set up a canning plant so that fruits and vegetables could be processed locally instead of being sent to Pakistan for processing. The first ADT recently returned to Missouri, and a second team deployed in December.

There are currently three ADTs composed of Army and Air National Guard volunteers in Afghanistan. A Texas ADT working in Ghazni Province has 58 people, 10 of them experts in various farm disciplines and the rest National Guard infantrymen. While the experts work with tribal and provincial members, the rest of the security forces can help local farmers plant crops. The commander of the team, Army Col. Stan Poe, told reporters at a Pentagon news briefing that the team is constructing dams that catch stream runoff and divert it for irrigation, developing a feed lot for cattle and building a sale barn; they plan to establish a wheat-seed farm, a hide-tanning facility and a wool-washing facility. Each project, Col. Poe emphasized, is based on the needs of the people and "must be sustainable"—the Afghans must be able to keep it going and maintain it. The ADTs, he said, work closely with provincial reconstruction teams and U.S. Department of Agriculture employees in Afghanistan. They also draw on academic and research capabilities in the United States. Col. Poe's team reaches back to experts at Texas A&M.

An ADT from Nebraska is the third team currently deployed to Afghanistan; teams from Indiana, Tennessee, Kansas, Kentucky and Oklahoma are set to participate in the program in 2009, with six more teams in place by the end of the year. The program will not only help rebuild sustainable farming in Afghanistan but will also help foster the cooperation and trust of the Afghan population.

Additional Deployments

The 4th Brigade Combat Team (BCT), 25th Infantry Division, based at Fort Richardson, Alaska, deployed to Afghanistan in February as part of the normal rotation of forces. The roughly 3,500 soldiers replaced the 4th BCT, 101st Airborne Division (Air Assault), which has been in Regional Command East since March 2008.

Nearly 1,000 Wyoming National Guard soldiers will deploy to Iraq and Kuwait in April. The largest single-unit National Guard deployment in the history of the state, it affects about 52 percent of the Wyoming National Guard. Brigade personnel will help ensure Coalition forces are protected, properly equipped and adequately housed.

Eighty-two soldiers of the 286th Combat Sustainment Support Battalion, Maine Army National Guard, deployed to Afghanistan for one year in late January.


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Iraq Provincial Elections. U.S. Army units throughout Iraq helped ensure that the country's provincial elections held on January 31 were peaceful. On election day, Iraqi forces were in the lead, with U.S. troops supporting them in the outermost ring outside polling sites.

By the end of the day, there were no reports of major violence, although one shooting did occur at a Baghdad checkpoint.

Weeks before the elections, Coalition forces, the Iraqi army, and national and local police held regional security meetings to discuss ways to make the elections safe.

U.S. soldiers, some with military police dogs, inspected polling sites and searched for possible explosives in the days leading up to the election. They helped plan security around polling places and provided equipment such as concrete barriers and metal detectors. U.S. and Iraqi troops also made targeted sweeps, arresting suspected suicide bombers and others who threatened the elections process.

Maj. Gen. Jeffery Hammond, commanding general of 4th Infantry Division and commander of Multi-National Force-Baghdad, told reporters a few days after the elections: "We had intelligence to suggest attacks were planned."

About 15 million Iraqi citizens were eligible to vote; a little more than half went to the polls. More than 14,000 candidates vied for 440 seats in 14 of Iraq's 18 provinces.

The peaceful elections are a milestone in Iraq's democratic development.

Local elections in Iraq will be held this summer, and national elections are scheduled for later in the year.



U.S. Army/Sgt. Jerry Saslav

U.S. Army soldiers provide support to Iraqi army troops at a checkpoint in Baghdad's Sadr City district. On January 31, the Iraqi government held provincial elections in which more than 14,000 candidates competed for 440 seats in 14 of 18 Iraqi provinces.

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from January 1 to January 31, 2009. All names have been released through the Department of Defense; families have been notified.

Spc. Ezra Dawson, 31
Spc. Keith E. Essary, 20
Spc. Joseph M. Hernandez, 24
Maj. Brian M. Mescall, 33
Spc. Jason R. Parsons, 24
Sgt. Joshua L. Rath, 22
SSgt. Carlo M. Robinson, 33
SSgt. Joshua R. Townsend, 30

Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from January 1 to January 31, 2009. All names have been released through the Department of Defense; families have been notified.

SSgt. Roberto Andrade Jr., 26
SSgt. Justin L. Bauer, 24
Pvt. Grant A. Cotting, 19
SSgt. Anthony D. Davis, 29
Sgt. Kyle J. Harrington, 24
CWO Matthew G. Kelley, 30
PFC Christopher W. Lotter, 20
Pvt. Sean P. McCune, 20
Spc. Matthew M. Pollini, 21
CWO Joshua M. Tillery, 31
CWO Benjamin H. Todd, 29
PFC Benjamin B. Tollefson, 22
PFC Ricky L. Turner, 20
CWO Philip E. Windorski Jr., 35

U.S. Leaves Wuerzburg. In January, the U.S. Army lowered the American flag over Leighton Barracks in Wuerzburg, Germany, for the last time, returning the installation to the host nation and ending a relationship of more than 60 years with the city of Wuerzburg and its surrounding communities. American occupation forces took control of Wuerzburg on April 7, 1945.

The 1st Infantry Division was stationed there from 1945 to 1955, returned to Leighton Barracks in 1996 and remained there until the summer of 2006; the 3rd Infantry Division was headquartered at Leighton from 1958 to 1996.

The Wuerzburg Army Hospital closed in November 2007 as part of Army Medical Command's transformation and realignment, which decentralized health care.

Reserve ESC to Afghanistan. About 250 soldiers—the headquarters of the Army Reserve's 143rd Sustainment Command (Expeditionary), Orlando, Fla.—are deploying to Afghanistan to provide logistical support. Originally scheduled to deploy to Kuwait, the 143rd was rerouted to Afghanistan not only to provide sustainment operations to the forces already there, but also to support some 20,000 additional U.S. troops expected to deploy there in 2009. The soldiers, in a five-year rotation, will spend one year in country.

Sustainment forces based in Kuwait are already in place in Afghanistan, but the 143rd is the first expeditionary sustainment command (ESC) to deploy there and will oversee supply, transportation, ordnance and other types of logistical and sustainment operations. The unit is one of five general officer ESCs in the Army Reserve.

The ESC transitioned from the former 143rd Transportation Command, which had about 800 troops in 14 units in four southeastern states, to about 8,500 Army Reserve soldiers in more than 90 units in Alabama, Arkansas, Florida, Georgia, Louisiana, North Carolina, South Carolina, Tennessee and Mississippi as part of the Army Reserve's transformation to an operational force.



U.S. Army/SSgt. Rauel Tirado

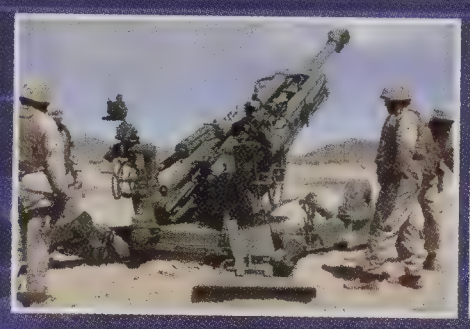
Brig. Gen. Daniel I. Schultz (right), commander of the 143rd Sustainment Command (Expeditionary), is assisted by CSM Michael Schultz as they encase the colors of the 143rd in preparation for their deployment to Afghanistan.

Housing in Korea. The Army has reached an agreement on terms for a $1.3 billion housing project at U.S. Army Garrison Humphreys, Republic of Korea. The single largest military housing project since World War II, it will provide 2,400 units of family housing.

In a press release announcing the project, Gen. Walter L. Sharp, commander of U.S. Forces Korea, said the project "is critical for the U.S. armed forces to meet its treaty commitments to relocate from Seoul" and that the "structure of the project allows for additional housing both at Humphreys and elsewhere in Korea as tours are normalized on the peninsula."

The project, called Park Place, will offer three-, four- and five-bedroom units

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GENERAL OFFICER CHANGES*



Maj. Gen. R.W. Cone from CG, CSTC-A, CENTCOM, OEF to Spec. Asst. to the CG, TRADOC, Fort Monroe, Va.



Maj. Gen. R.J. Sherlock from Spec. Asst. to the Dir. of Ops., J-3, Jt. Staff to Dir. for Plans and Programs, AFRICOM.

Brigadier Generals: **J.C. Boozer Sr.** from Asst. Div. Cmdr. (M), 1st Armored Div., USAREUR and Seventh Army to Dep. CG, FMWRC, Alexandria, Va.; **W.N. Phillips** from CG, Picatinny Arsenal/Cmdr., JM&LLCMC/PEO, Ammo, Picatinny Arsenal, N.J., to Cmdr, JCC, MNF-I, OIF; **E.M. Reeder Jr.** from Exec. Off. to the Cmdr., USSOCOM, MacDill AFB, Fla., to Cmdr., CFSOCC-A, OEF; **M.A. Ryan** from Dep. CoS for Ops. and Intel., G-3/G-2, ARRC to Dir. of Strategic Effects, USFOR-A, OEF; **J.A. Scarbrough** from Asst. Dep. for Acquisition and Systems Mgmt., OASA(ALT), Washington, D.C., to JPEO-CBD, Falls Church, Va.

■ ***AFRICOM***—*U.S. Africa Command;* ***ARRC***—*Allied Rapid Reaction Corps;* ***CENTCOM***—*U.S. Central Command;* ***CFSOCC-A***—*Combined Forces Special Operations Component Command-Afghanistan;* ***CSTC-A***—*Combined Security Transition Command-Afghanistan;* ***FMWRC***—*Family and Morale, Welfare and Recreation Command;* ***JCC***—*Joint Contracting Command;* ***JM&LLCMC/PEO***—*Joint Munitions and Lethality Life Cycle Management Command/Program Executive Officer;* ***JPEO-CBD***—*Joint Program Executive Office for Chemical and Biological Defense;* ***MNF-I***—*Multi-National Force-Iraq;* ***OASA(ALT)***—*Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology);* ***OEF***—*Operation Enduring Freedom;* ***OIF***—*Operation Iraqi Freedom;* ***TRADOC***—*U.S. Army Training and Doctrine Command;* ***USAREUR***—*U.S. Army Europe;* ***USFOR-A***—*U.S. Forces Afghanistan;* ***USSOCOM***—*U.S. Special Operations Command.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

with American-style residential design features in a Korean-inspired environment. Park Place will consist of two distinct communities on two parcels totaling 144 acres. The development will feature high-rise residential towers and a main town center that blends two-story traditional townhouses with storefront retail space. Each neighborhood will boast a large community center, parks, playgrounds, athletic fields, underground parking and open space.

The project is the military's first privatized housing venture on an overseas base. The Army chose that approach because of the tight schedule to complete troop relocation from Seoul to Pyeongtaek, a rural area about 55 miles south. The target date for completion of the development is 2012. It will allow the Army to relocate up to 44,000 troops and family members now stationed at the 600-acre Yongsan Garrison, which the South Korean government wants to redevelop, and several other installations north of Seoul. Soldiers assigned to South Korea may enter into a standard lease and rent a home at a rate equal to the monthly overseas housing allowance.

USAR Partners with GE. The Army Reserve added General Electric in January to more than 150 participants in its employer partnership initiative. The partnership program, launched in April 2008, is designed to gain support from companies that employ Reserve soldiers as well as develop employer partnerships in key areas such as law enforcement and health care. The first partners to enter such agreements with the Army Reserve were Inova Health System, a six-hospital corporation in northern Virginia, and the American Trucking Association.

Under the agreement, General Electric and the Army Reserve will work together to develop long-term job solutions for soldiers and veterans; the company currently employs about 11,000 veterans.

Disability Evaluation. The disability evaluation system (DES) pilot program, in which only one evaluation is necessary after a servicemember is referred for a service medical evaluation board, is expanding. Implemented in November 2007 in the National Capital Region, the program simplifies the current disability evaluation process that requires two evaluations by using a single-source disability evaluation done by the VA and accepted by DoD.

The pilot, tested at military treatment facilities at Walter Reed Army Medical Center, Washington, D.C.; Andrews Air Force Base, Md.; and National Naval Medical Center, Bethesda, Md., last October, grew to include Fort Meade, Md., and Fort Belvoir, Va. Other installations currently implementing the program are Fort Drum, N.Y.; Fort Stewart, Ga.; and Forts Wainwright and Richardson, Alaska. By June 1, the pilot is expected to start up at Fort Carson, Colo.; Brooke Army Medical Center, Texas; and Fort Polk, La. Since the pilot began, some 1,000 servicemembers have participated in the program.

DoD also announced a new policy to expedite the treatment of a servicemember seriously injured in combat from military to veteran status by waiving the disability evaluation system. According to DoD, the new process applies to those whose conditions are designated as catastrophic—that is, "an injury or illness that is a permanent, severely disabling injury, disorder or disease that compromises the ability to carry out the activities of daily living to such a degree that a servicemember or veteran requires personal or mechanical assistance to leave home or bed, or requires constant supervision to avoid physical harm to self or others."

The new process is an option for servicemembers who qualify. Those who participate in the expedited process will be rated by DoD at a combined rating of 100 percent, and the VA will identify the full range of benefits, compensation and specialty care it offers. ★

COMMAND SERGEANTS MAJOR CHANGES*



CSM R.R. Beam from V Corps to USAREUR and Seventh Army.



CSM M.L. Hill from MNF-I to CENTCOM.

■ ***CENTCOM***—*U.S. Central Command;* ***MNF-I***—*Multi-National Force-Iraq;* ***USAREUR***—*U.S. Army Europe.*

**Command sergeant major positions assigned to a general officer command.*

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Evolving War Imperatives

By Gen. Frederick J. Kroesen
U.S. Army retired

The evolution of 20th-century warfare followed a path that has seen the reaction to violence become an influential if not a controlling factor in any determination to employ military power.

World War I was a military conflict. Millions of French, British and German soldiers died on the battlefields; the civilian populations were relatively unscathed, however, except for the German march through Belgium, a few German zeppelin forays over London and early British retaliation bombing, and along the border areas of France and Germany. For the most part, violence occurred on the battlefield.

During the 1930s, wars became total, reverting perhaps to earlier ages when death or slavery were the only choices for a subjugated population. The Japanese Nanking Massacre and the Italian conquest of Ethiopia both targeted civilians, theorizing that the terror and genocidal threat would cause the people to demand their leaders surrender to their conquering armies.

World War II perfected the methods and means of violence directed toward civilians. The Germans laid waste to all in their path through Poland, matched—perhaps surpassed—by the Soviet Army, which massacred whole towns as it joined the assault. The Germans compounded the tactic with their indiscriminate bombing of Coventry and London as they sought to drive Britain out of the war. Allied retaliation was massive, remorseless and devastating. Hamburg, Tokyo and hundreds of other cities suffered bombing holocausts before, ultimately, the atomic bombs on Hiroshima and Nagasaki finalized the "legitimacy" of civilians as targets. At the time, the world seemed to tolerate "all is fair in love and war" thinking, especially as the wartime leaders concluded that this strategy contributed to the Allies' success.

The years following that war have seen gradual, subtle changes in world opinion that now affect the conduct of wartime operations. A general revulsion accompanies any report of civilian casualties, usually delineated in headlines such as: "Missiles Kill 24, 20 Civilians and Four Believed Terrorists." The typical article then describes the devastation caused, the ages of any children involved and the number of families affected. Seldom is there an explanation or exposé of the reason justifying the attack.

Also increasing over that time period has been the current aversion to the use of any force that can be described as disproportionate or excessive. Proponent language, which usually suggests a charge of war crimes, contradicts what has long been American doctrine—that "overwhelming force" is the quickest, most decisive and least costly way to settle a conflict. Evidence supporting that doctrine is incontrovertible. Continuing to expound the disproportional argument is ludicrous.

Nevertheless, the phenomenon of public opinion as a prime factor affecting the planning of military operations is apparent. Regardless of provocation or any belief in a "just war," a military planner must now contemplate that any operation will generate an immediate resolution calling for a cease-fire and a general political reaction deploring the resort to war. There exists the popular consensus that diplomacy can and should resolve all disputes.

Our active enemies are fully aware of and are expert in the potential exploitation of this state of human awareness. Terrorist groups worldwide—with no industrial base and no (apparent) national identity—have only three exploitable resources: manpower, money and propaganda. They employ manpower through individuals—suicide bombers or small squads to commit violence and atrocities—and through the civilian population, which absorbs the casualties that are grist for their propaganda campaigns. Their money, mostly donations to their cause, is spent obtaining weaponry and rewarding the families of their sacrificed heroes. Their vulnerabilities are their assembly and training installations, their communications networks, and their fickle and inconsistent financial supporters.

Winning the counterterrorism war requires broad offensive action against each of those vulnerabilities, coupled with surgical strikes employing overwhelming power to destroy speedily and completely every target engaged. (Speed is required for the forestalling of the cease-fire demand.) Whether to withdraw after inflicting punishment or to remain in control of the target as essential for winning the war must be decided in advance of the operation.

We are faced with a long war against an enemy implacably dedicated to our destruction. We must sustain for an indefinite period superbly trained, technically superior, and fully equipped and supported armed forces, directed by political leaders who are committed to our ultimate success. The very survival of our nation is at stake, and the guarantee of liberty for our descendants is a legacy we cannot forsake. □

GEN. FREDERICK J. KROESEN, USA Ret., is a former commander in chief of U.S. Army Europe and a senior fellow of AUSA's Institute of Land Warfare.

Some Thoughts on Money and People

In January, Nelson M. Ford resigned his position of Under Secretary of the Army. The following excerpts are from his farewell address, which he delivered at the Pentagon upon his resignation.

Most of you have heard me describe the reductions in Army spending that followed every war for the last 230 years. History suggests that, despite our best efforts to explain the Army's need for future expansion in its base funding, reductions will happen again and probably soon. That means that if we are going to avoid the next hollow army, we need to start now figuring out how to do more with less.

This is not impossible. I know it feels impossible to most people in the Army (we always have a list of UFRs [unfunded requirements] that we think somebody ought to fund), but American businesses figured out how to do more with less in the 1980s. And what they figured out is that you can be both more effective and more efficient at the same time.

The Secretary [of the Army] and the Chief [of Staff of the Army] have launched the enterprise task force [ETF], which, I believe, will help the Army explore how to adapt our institution to the coming fiscal challenge. From my perspective, the key test for the ETF is not in designing the new wiring diagram for the reorganization; it is figuring out what effects we are trying to achieve and how to measure our ability to achieve them.

Let me give you an example: We all know that the modular BCTs [brigade combat teams] are more effective than legacy brigades. But how much more effective? If we knew how much more effective they are, would that change our calculus about how many of them we need?

I don't know the answers to these questions, but they are the kinds of questions I think we need to be asking in the future.

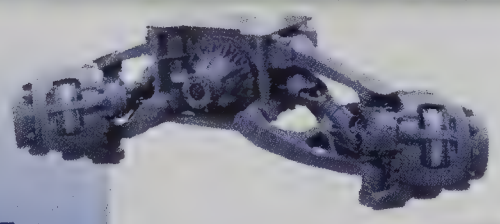
The reason that understanding effects is so important is that for the Army, *effectiveness* is the gold standard, not efficiency. In any case, you can't be more efficient until you understand what your effectiveness measures are—what it is you're trying to do.

This exercise will lead inevitably to the conclusion that the Army has more mission than money and will cause us to make some tough choices. Tough choices … are inevitable. The question I leave you with is this: In a dangerous world, in an era of persistent engagement when we are unlikely to have a year or two to get ready to respond, how can we sustain our readiness?

There are likely to be things that we are attached to that we will have to forgo, and there will be some jobs that

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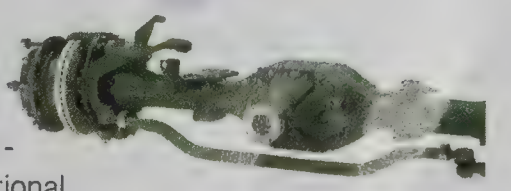




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we just won't be able to do. I know that "no" is not an Army value, and I'm not trying to change that now. But let me suggest that when someone comes up with the next great task ... to give the Army, we temper "yes" with some qualifiers, like "if" or "but" or "when." I know this will be hard at first, but if we know what effects we are trying to achieve and we know how much money it takes to achieve each one, then we will be standing on a firm foundation—not sand—when these words cross our lips.

The alternative is an army with too much to do and not enough money to succeed. We've had that experience before.

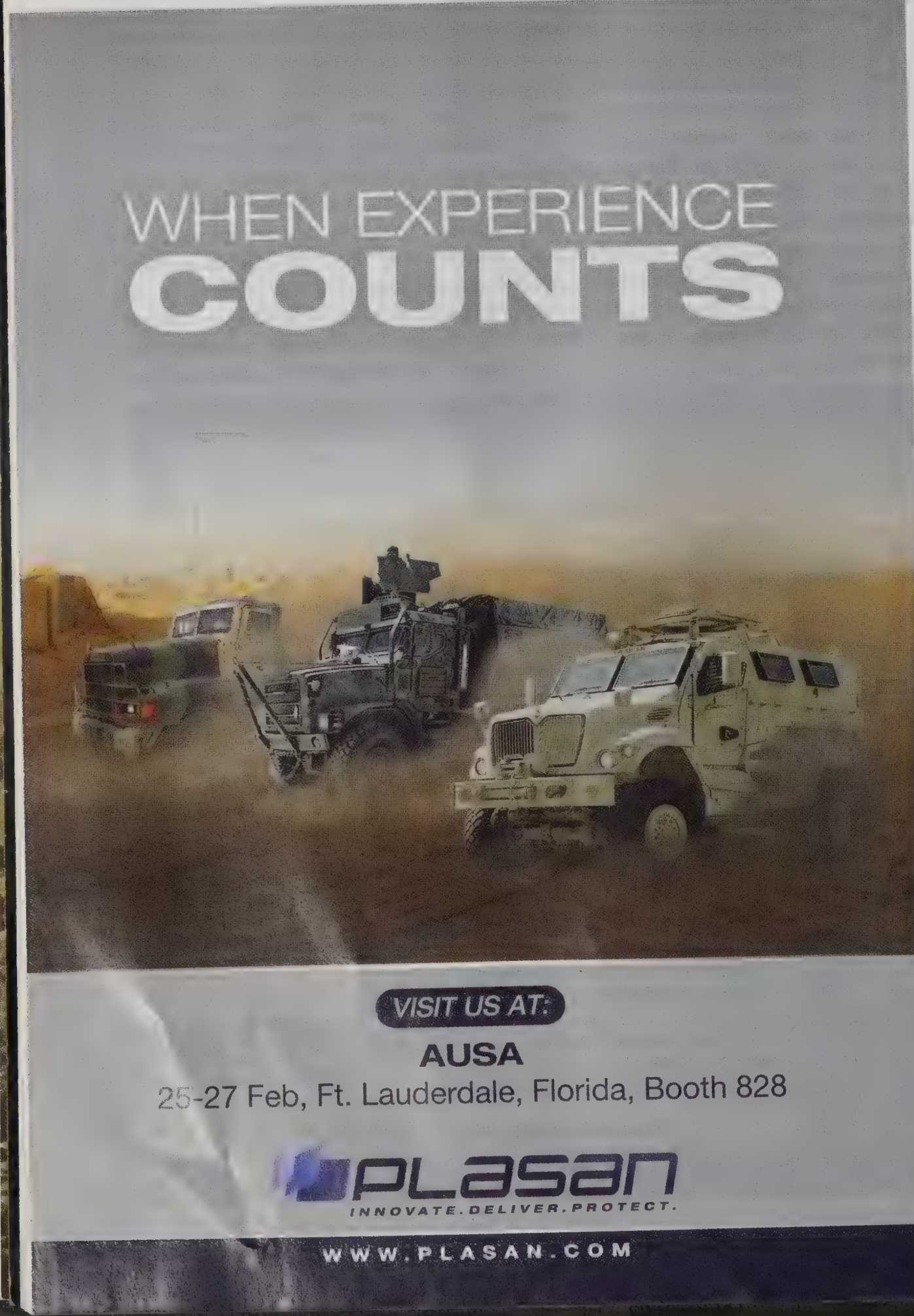
Finally, let me talk a little bit about our people. We have the best army in the world, perhaps one of the best in history. Our soldiers are all volunteers, and they understand the values they are fighting for. We have been operating at a very high OPTEMPO for seven years, and, while we are strong, we are tired. You can see it in the eyes of the sergeants in Afghanistan (I had dinner with about 20 of them the night before Thanksgiving), and you can see it in the 3rd Infantry Division soldiers who are getting ready to go again. (I met with a similar size group at Fort Stewart, Ga., in December.)

They are committed to their missions; their resolve is strong. But whether they are deployed or preparing for [deployment], they do want to know when the pace will subside. They are not robot soldiers. They bleed and break like the rest of us, but they are much tougher. As we begin to do conditions-based assessments of our equipment, we also need to figure out how to do conditions-based assessments of our soldiers.

We need to understand not only the cumulative effects of seeing combat, of seeing your friends killed and wounded over multiple deployments, but also the stress of 18-hour days for months on end, of eating with a weapon in your lap, of missed birthdays and holidays. In short, we need to know the cost to the minds and bodies of our soldiers.

Our sister services have established relatively short deployment lengths, which they protect vigorously. Our deployments are longer, and their lengths seem more flexible. We know how long it takes to reset an M1 tank, but we don't know how long it takes to get a soldier physically and psychologically ready for the next mission.

Let me suggest a NASCAR example to reinforce [the importance of this issue]. The reason for a red line on an engine's tachometer is to let you know when you are damaging the engine. Usually, the engine doesn't fail the first time [the dial] crosses the red line, but if you continue to rev it too high, it will fail eventually. The Army's strength is in its people. They are our most precious and most expensive asset. If we're going to continue to meet the nation's expectations, if we're going to keep rolling along, we need to watch those red lines carefully.



This is War ... Really

By Lt. Gen. James M. Dubik
U.S. Army retired

It seems hard for some military and political leaders as well as others to understand that our fight against al Qaeda and its affiliates is really a war. In fact, I've had several conversations over the past few months with people who believe we are fighting not a war, but some kind of police action against terrorist criminal activity. We cannot hope to structure a clear and comprehensive strategy if we lack clarity and comprehensive understanding of the task at hand.

"As a total phenomenon," Clausewitz tells us, war is best understood in terms of a remarkable trinity composed of "primordial violence, hatred, and enmity ... the play of chance and probability ... and ... of subordination, as an instrument of policy." He equates the first element of this trinity with the people, the second with the commander and the army, and the third with the government. "The political aims," Clausewitz states, "are the business of government alone." War is, therefore, a continuation of political activity by other means—for instance, using force to compel an enemy to do a state's will.

In the 19th century, nation-states, in pursuit of political aims, seized the monopoly on the use of force. At the time Clausewitz wrote, it was mostly nation-states that had the means to wage war: human capital, money, production, supply chains, the organization to make all this work together toward a common set of aims and a population willing to support this huge effort. Explaining war in terms of people, the army and government were Clausewitz's primary focus. He knew, however, that war cut a wider berth. In fact, Clausewitz describes war as a chameleon that "slightly adapts its characteristics to the given case."

"Every age," he goes on to write, "had its own kind of war, its own limiting conditions, and its own peculiar preconceptions." At the time Clausewitz wrote, the nation-state had been ascending for about 200 years, but he was aware that war had other "ages." We should be aware of this as well—what we have seen and are seeing in Iraq and Afghanistan is the chameleon of war changing yet again.

In the war we are fighting, the leadership of al Qaeda, rather than the government of a nation-state, has provided the reason for subordination. In lieu of a national population, al Qaeda's ideology—complete with an interpretation of both history and current conditions—has created the enmity, hatred and motivation within its affiliate groups and their followers. The elements of chance and probability are provided not by a conventional army but by a variety of unconventional irregulars and terrorists ranging from true believers and suicide bombers to



those on the street paid to lay an improvised explosive device (IED) or act as early warning to criminals selling their skills to whomever pays.

Al Qaeda has figured out a way to raise not only human capital in fighters and leaders, but also to raise the money to pay its fighters and purchase arms, equipment and supplies. It has also figured out how to create a supply system and build an organization—actually, a network of loosely affiliated organizations—and, most important, how to make all this work together toward the political aims laid out in its strategy. Nation-states' monopoly on waging war has eroded.

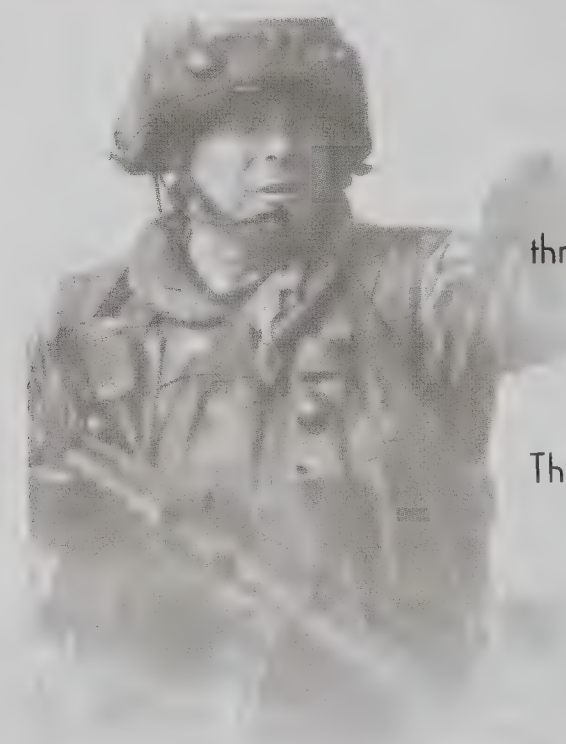
The real problem with understanding the war we are fighting lies within our mental framework. Legally, diplomatically and militarily, we understand *war* too narrowly as the conventional militaries of one nation-state or group of nation-states fighting against those of another. According to this framework, all other use of violence is crime or "operations other than war." The chameleon, however, is changing colors. We can hold to our framework and refuse to call this a war. Or we can recognize what Clausewitz called "the most far-reaching act of judgment that the statesman and commander" can have: "to establish … the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature."

The genius of al Qaeda lies in its ability to combine the profits of criminal activities with a coherent and resonant ideology, as well as within its organizational construct: Its network is loose enough to allow local groups to exploit local inequities, dissatisfactions and hopelessness even without direct involvement from "the home office," but tight enough to maintain focus on the main strategic goal of replacing the nation-states it targets with its versions of a caliphate. Unlike those of most insurgencies, however, al Qaeda's documents describe a strategic goal that is global, not just local or regional. The group has described multiple times and in open form not only its goals, but also the ways in which it plans to achieve them and the means it intends to use. Its members understand that they are fighting a global insurgency, which they have dubbed a "defensive jihad."

Why is it important that we understand that we are fighting a war and that the war is of a certain type? Simple: If we acknowledge that we are fighting a global insurgency being waged by a network of groups loosely affiliated with al Qaeda or its ideology, then the probability increases that we will be able to structure a proper global counterinsurgency strategy. If we are unable to recognize that we are fighting a war—a global insurgency—even though our enemies do, that probability decreases.

The global counterinsurgency is not a war against Islam; it is not a "clash of civilizations." It is a war against known insurgents who have declared war against us, published a set of strategic goals and a strategy, and have operated pursuant to that strategy for more than a decade.

Successful counterinsurgency strategies deny freedom of movement to



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the insurgents. Such strategies also deny access to financial and logistical support. They counter the ideology of the insurgents not just with words, but also by enhancing governmental effectiveness in providing for the population. Success lies with a mix of targeted, kinetic combat operations—special operations, police and conventional military—as well as with a mix of nonkinetic civil, informational, governmental and economic operations. The necessary counterinsurgency strategy has to be integrated not only into the action of local governing authorities within a given nation-state but also among the global organizations, civil and military, that will have to be tasked with (or created to carry out) planning and executing strategy on a global scale. Success will result from a comprehensive strategy that is flexible enough to allow for local variations, yet coherent enough to work globally.

A successful strategy against the kind of insurgency we face does not depend on the (false) belief that "taking out the head" will end the insurgency, nor does it depend on a unilateral approach. Military action, while necessary, is not sufficient; neither can it be carried out by a single nation. Globally, counterinsurgency must be waged in theaters with sequenced civil-military campaigns conducted by the military leaders and diplomats of many nations, and with sufficient cohesiveness to achieve common goals.



DVIDS

A soldier from the 25th Infantry Division prepares to track al Qaeda insurgents in the Tamiyah area, north of Baghdad.

Our predecessors shed preconceptions, created new organizations, developed new coordination mechanisms and aligned the priorities of multiple nations to fight World War II, their global war. That war was easier to understand because it was the paradigm of our mental framework: a conventional war of one set of nation-states versus another set of nation-states. A global insurgency is very different, much less clear—but failure is not an option. We need to understand that we are fighting a war and that the war is a global insurgency. Only then can we derive from that understanding a specific global counterinsurgency strategy. □

LT. GEN. JAMES M. DUBIK, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.



The International Economy and Army Thinking

By William R. Hawkins

The U.S. Army War College put out a Key Strategic Issues List last summer that pulled together research topics from a variety of military commands and organizations. It was intended to stimulate interest among both civilian and military thinkers about topics "of particular interest to the Department of the Army." Among the long list of subjects presented on behalf of the Army's Special Operations Command (SOCOM) was one that may have seemed out of place: "How high will fuel costs have to be and/or how low will fuel supplies have to be before the low costs of foreign labor are offset and production of goods made in the United States (clothes and electronics, for example) becomes economically feasible again? In other words, when will the costs and availability of transportation begin to work against a global economy and for a regional economy, and push the United States toward an isolationist policy?"



Since July 2008, the international economy has suffered hits far heavier than rising fuel costs. The financial crisis that started in the United States and spread to cripple banking throughout the Western system has now plunged the global economy into a recession. Ironically, the downturn in economic activity has reduced fuel costs. The real issue behind the SOCOM question is broader than the cost of oil or other commodities. The true questions are: To what extent does economics drive international relations, and what is the impact of trade on the risks of conflict?

The end of the Cold War inspired the notion that a new world was dawning, one built on international cooperation for material progress. Many thought that the triumph of capitalism over communism would open the door to global commerce and peace. This idea was based on the theories of classical liberalism, which emerged in the wake of another long conflict, the Napoleonic Wars.

The period of relative peace in the early 1800s following decades of war brought forth many idealists. The British activist Richard Cobden claimed that commerce was "the grand panacea" and that under its influence "the motive for large and mighty empires, for gigantic armies and great fleets would die away." The French economist Frédéric Bastiat asserted that "free trade means harmony of interests and peace between nations." Jeremy Bentham argued for the replacement of "offensive and defensive treaties of alliance" with "treaties of commerce and amity." Thomas Paine, believing that "man is not the enemy of man," proposed that all warships be converted into merchant vessels.

History was not kind to these proposals. The century following Cobden's claim that the days of empires, armies and fleets were over saw two

world wars, a number of smaller conflicts within Europe and Asia, and nearly constant colonial wars as empires expanded throughout the world. Great Britain was home to the most prominent classical liberal thinkers. During the long reign of Queen Victoria (1837–1901), however, not a single year passed without British troops engaging in combat somewhere.

Paul Bairoch, the 20th-century postwar economic historian, found that economic growth was stimulated when the states of Continental Europe shifted back to protectionism from their flirtation with free trade in the early 1800s. During the era when protectionism was being restored (1877–1913), industry on the Continent grew at nearly triple the pace compared to the period when Continental growth was being suppressed by exports from a more advanced England. This European movement was supported by the same political alliance of "iron and wheat" now seen in India and China, Japan and South Korea, Brazil and South Africa. Trade in the aggregate continued to expand right up to the outbreak of World War I, but most governments understood it was a competitive world in which policy needed to shape economic flows in the national interest. None of them became isolationist—just the opposite, in fact.

Wars have always been limited by the resources that could be mobilized to sustain military operations. As the wealth of nations grew, so did ambition. In his book *The Wealth and Poverty of Nations,* economic historian David S. Landes wrote of this period: "Europe consisted of states big and small, each steered by the pride and interest of the ruler, but increasingly by self-aware nationalism. All vied. All knew the significance of money for standing and power." If a nation's merchants and industrialists were productive and able to dominate large markets, then its government had a strong material base to support its positions by diplomacy and, if need be, by war.

Unfortunately, in the 1990s the illusions of the earlier postwar period returned. There was a flood of predictions that the nation-state would evaporate by the turn of the century, superceded by global institutions and disintegrating as divergent groups pursued their own private interests. Corporations and banks maneuvered to fill both roles as private actors on a global stage. In 1992, Ricardo Petrella, director of science and technology forecasting for the then-European Economic Community, claimed: "The real decision-making powers of the future ... will be transnational companies in alliance with city-regional governments."

That same year, Walter B. Wriston, chairman of the Citicorp banking enterprise, stated in his provocatively titled book *The Twilight of Sovereignty:* "When a system of national economies linked by government-regulated trade is replaced—at least in part—by an increasingly integrated global economy beyond the reach of much national regulation, power changes hands." The world now knows what happens when the banking system tries to operate beyond the reach of regulation.

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"I'm feeling a bit more secure about the world situation. He just invested in a six-year certificate."

In November 2008, the U.S. government announced a $20 billion capital injection into Citigroup and agreed to shoulder most of the company's losses on a $306 billion portfolio of potentially troubled assets. In exchange, the government received preferred shares and warrants that partially nationalized the firm. The fresh capital came after a $25 billion injection the previous month. Corporations have proven to be far more fragile than nation-states, which, in the end, retain their power and the need to use it.

The idea of a global economy is not new. Two years before Adam Smith's *The Wealth of Nations* appeared in 1776, the German philosopher Johann Gottfried von Herder asked: "When has the entire earth ever been so closely joined together by so few threads? Who has ever had more power and more machines, such that with a single impulse, with a single movement of a finger, entire nations are shaken?" It is *how* the international economy is orchestrated that matters, and the defining characteristic of international economics is the same as that of international politics: competition.

At the July 2008 meeting of the major national economies in Geneva, Switzerland, the rising states successfully resisted pressure from the United States and the European Union to open their markets. The developing countries were always going to be allowed to keep higher-than-average tariffs, but they wanted the right to protect strategic sectors with "safeguards." The current global recession will only intensify rivalries and lead to more safeguards. The aim will be to force rivals to adjust to the down market, while domestic firms survive to fight another day when growth resumes. In this effort, they are not just protecting themselves from the developed countries, but from each other.

Ebrahim Patel, a South African labor leader, was critical of Western pressure to limit his country's ability to shelter sectors like textiles, automobiles and electronics. He said his country's electronic sector had been "virtually wiped out because of China, China, China."

The National Intelligence Council (NIC), which serves the Director of National Intelligence, released its report *Global Trends 2025: A Transformed World*



in November 2008. It found that "China is poised to have more impact on the world over the next 20 years than any other country. If current trends persist, by 2025 China will have the world's second largest economy and will be a leading military power." The report also states: "U.S. security and economic interests could face new challenges if China becomes a peer competitor that is militarily strong as well as economically dynamic and energy hungry." The NIC warns that "China's international standing is based partly on foreigners' calculations that it is 'the country of the future.'" Beijing's rapid economic growth has given the world this impression. China today can be compared to Germany at the end of the 19th century—an authoritarian state with a capitalist economy. Like that of the Kaiser's regime, Beijing's legitimacy is based on nationalism and the drive to become the most powerful nation in its region. Behind China are other developing states (and in the case of Russia, a resurgent state) with grand ambitions.

The lead developing countries today are in the same position as the Continental European powers in the late 19th century. They reject their assigned place as "customers" or low-end producers in a static division of labor. They aspire to create the advanced capabilities that will make them first-class players in world affairs. Their high savings and investment rates and their limits on competing imports are reminiscent of French economist Charles Ganilh's words from 200 years ago: "To judge the wealth of a nation, a measurement of the goods that are consumed should not be taken, rather a measurement of the ability of the nation to produce these goods."

The NIC report states: "We anticipate that arms races, territorial expansion and military rivalries that characterized late 19th century multipolarity will be less significant in the emerging one, but we cannot rule out such possibilities. For most countries, strategic rivalries are likely to revolve around trade, investment, technology innovation and acquisition. However, increasing worries about resources—such as energy or even water—could easily put the focus back on territorial disputes or unresolved border issues." The NIC left out that access to markets on preferential trade terms is often a consequence of diplomatic alignment or regime change. The report also predicted that "by 2025, the international system will be a global multipolar one with gaps in national power continuing to narrow between developed and developing countries" as the result of the spread of industrialization and technology. Special Operations Command is wrong to cast a more regional (or national) trade policy as "isolationist" if the objective is for the United States to better marshal its strength to project power in the world arena.

These are the kinds of international economic changes that the Army needs to think about because the military will have to deal with the results. □

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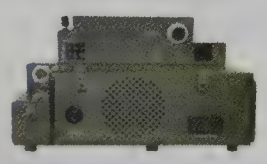
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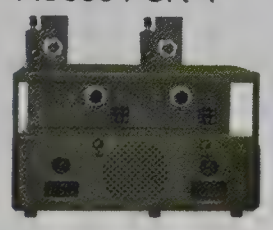
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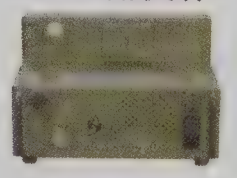
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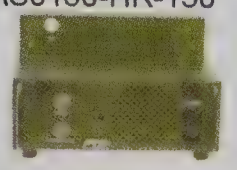
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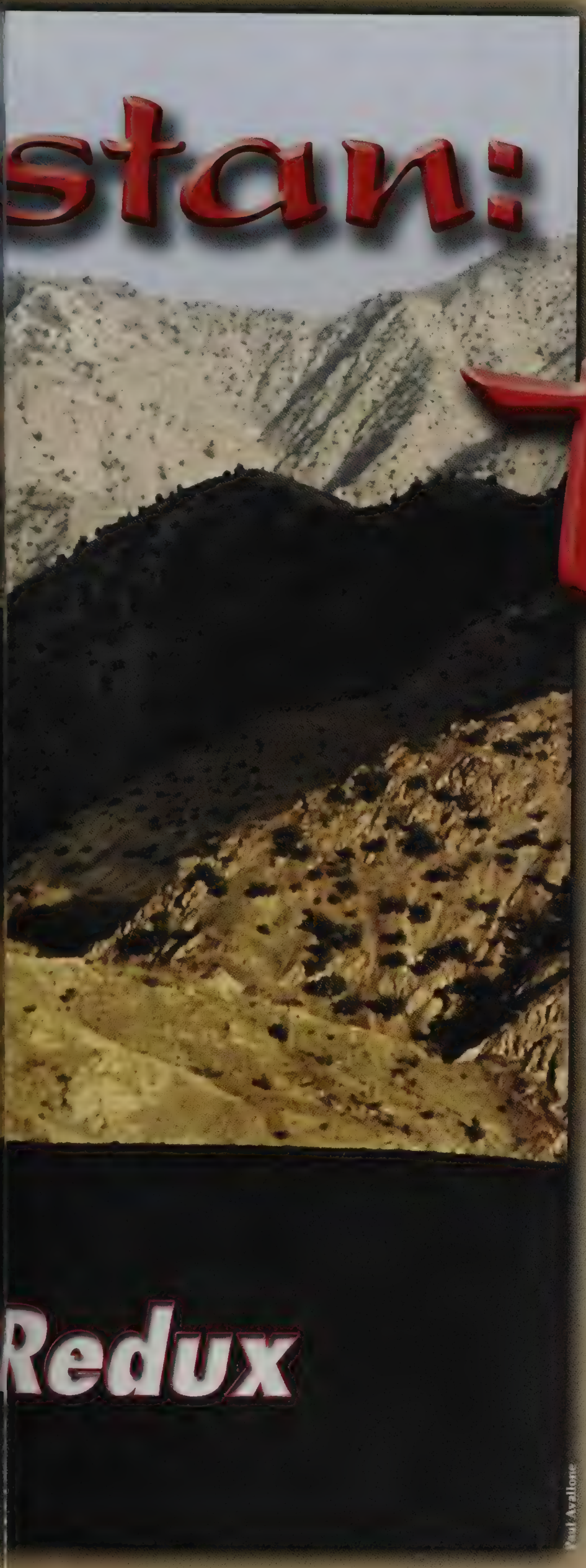
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America's Main Effort

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Paul Ayallone

By Dennis Steele
Senior Staff Writer

The equivalent of an Army division has been requested to reinforce the NATO mission in Afghanistan, which will allow U.S. troops to launch an aggressive campaign to secure towns and villages and tamp down a morass of violent factions that threaten the country, including a resurgent Taliban and continued threats from terrorists with al Qaeda ties along with opium kingpins, bandits and run-of-the-mill tribal warlords. Meanwhile, soldiers must contend with near top-to-bottom corruption and paralyzing poverty in Afghanistan and overcome an ingrained Afghan virulence against outsiders on their soil. Beyond that are the ramifications of what appears to be the Great Game 2.0 being played in the region.



Guardian armored security vehicles roll into Forward Operating Base (FOB) Shank, Afghanistan, as the 3rd Brigade Combat Team (BCT), 10th Mountain Division (Light Infantry), deploys into its operating area from Bagram Airfield, Afghanistan. The 3rd BCT is the first brigade to deploy to Afghanistan under plans to bolster American forces. Three more BCTs and additional support and combat enhancement units are expected to be deployed to Afghanistan by the end of this summer, effectively doubling the number of U.S. troops participating in Operation Enduring Freedom.

U.S. Army



A 3rd BCT, 10th Mountain Division soldier guides a truck laden with equipment containers as the brigade moves into FOB Shank.

U.S. Army

The mission for American soldiers and those of NATO allies fighting alongside them is straightforward: Pacify a land that has not been sufficiently pacified by royals, rogues or foreign armies since the dawn of Western written history, including efforts by the Persians, Macedonians, Mongols and nearly every other ancient heavy hitter on two continents—most recently by the British Empire at its zenith and the former Soviet Union entering the depth of decline.

Operation Enduring Freedom in Afghanistan is the main combat effort again after being eclipsed by the war in Iraq—some say hobbled by it—for six years. The United States plans to double its military commitment to Afghanistan by the end of this summer, ultimately providing nearly two-thirds of the troops for the NATO mission's International Security Assistance Force (ISAF) if allies do not also increase their force levels.

The near-term American objectives in Afghanistan, which remain the same as when U.S. soldiers launched operations in 2001 in the wake of 9/11, entail defeating al Qaeda and its Taliban sponsors and denying Afghanistan as a planning, training or staging base for terrorist acts.

"It is imperative that Afghanistan does not become a sanctuary for transnational, violent extremists," said Gen. David H. Petraeus, commander of U.S. Central Command (CENTCOM), a few months ago. "It is for that reason that the United States took action in Afghanistan over seven years ago, and that basic objective remains valid today."

Reenergized emphasis will be on short-term goals, not long-term, big-ticket moves to reshape Afghanistan as a semimodern economy—which, even if possible, would be prohibitively expensive.

"Our goal needs to be to make sure Afghanistan does not become a base for terrorists to launch attacks," Secretary of Defense Robert M. Gates said in late January. "If our goal is to create some Central Asian Valhalla, we will lose. Nobody has the time, the patience or the money to do that. … We need to keep our objectives there realistic. Otherwise, it will be a failure."

Secretary Gates expressed earlier that "the goals we [had] for Afghanistan [were] too broad and too far in the future; [they were] too future-oriented. … We need more concrete goals that can be achieved realistically within three to five years."

Afghanistan is said to be enduring spiking violence

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U.S. Forces Afghanistan

American soldiers investigate wreckage from a vehicle-borne improvised explosive device (VBIED) that was detonated in Kabul, Afghanistan, in January. Afghanistan experienced an increase in VBIEDs and other terrorist explosive devices last year as violence escalated throughout the country.

throughout the country, including an increase in attacks against ISAF's remote bases, a rising number of suicide bombers and propagation of improvised explosive devices (IEDs). Last year, 3,276 IEDs were either detonated or discovered in Afghanistan, a 45 percent increase over 2007, and deaths of U.S.-led Coalition troops due to bombs doubled to more than 150.

The Taliban has reemerged openly in some areas, particularly in the west along the Iranian border; the southern horn of the country, including the country's largest opium-poppy growing region; and some areas near Kabul. It is not as though Taliban fighters retook territory in head-to-head battles against ISAF, however, or that NATO forces retreated. The Taliban is grabbing rural expanses where ISAF has no control because it lacks forces to do so. The Taliban is employing a version of a colloquial American baseball strategy: "Hit it where they ain't."

"It is … clear that we have not had enough troops to provide a baseline level of security in some of the most dangerous areas—a vacuum that increasingly has been filled by the Taliban," Secretary Gates noted.

Hostile activity generally has increased along the Afghanistan-Pakistan border, and there has been a significant increase in the number of foreign fighters coming into Afghanistan, including Chechens, Uzbeks, Saudis and Europeans.

In mid-February, the Taliban struck government ministry buildings in Kabul, killing more than 20 people and wounding many more. The attack came the day before U.S. special envoy Richard C. Holbrooke arrived for talks.

The supply line from Pakistan's ports has been attacked several times, including a December 2008 attack against a truck stop on the Pakistan side of the border that destroyed 100 trucks. American military officials were quick to say that the supply line was not seriously affected by the attacks and very far from collapse. Nevertheless, American officials were equally quick to reach agreements with Russia and Central Asian states to establish a northern supply route to augment the southern route or replace it if necessary. On average, about 350 trucks per day carry goods and equipment into Afghanistan from Pakistani ports. ISAF forces currently receive 70 to 80 percent of their sustainment by road from Pakistan.

Meanwhile, the Kyrgyzstan government initiated action to end the lease agreement for American use of Manas Air Base, which is a strategic air hub and staging base for Afghanistan. U.S. officials believe the action resulted from a move by Russia to outbid the United States for the base and reassert its influence in Kyrgyzstan and regionally.

Just as American troops currently receive most of their bulk materiel via the Pakistan route, so does the enemy. The uncontrolled northwestern region of Pakistan provides arms, fighters and safe haven on a scale that can be said to overshadow that of Cambodia's role during the Vietnam War. There is no easy fix for the dual role that Pakistan plays—indispensable ally and enemy sanctuary. There are further complications in Pakistan, including whether it will escape becoming a fundamental Islamic state either by election or usurpation. If it becomes something approaching a rogue state, how long will it continue to be allowed to possess nuclear weapons?

As the Taliban has continued its push eastward into Afghanistan, there



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A Camp Eggars force protection team member calls in a preliminary report from the Kabul VBIED site.

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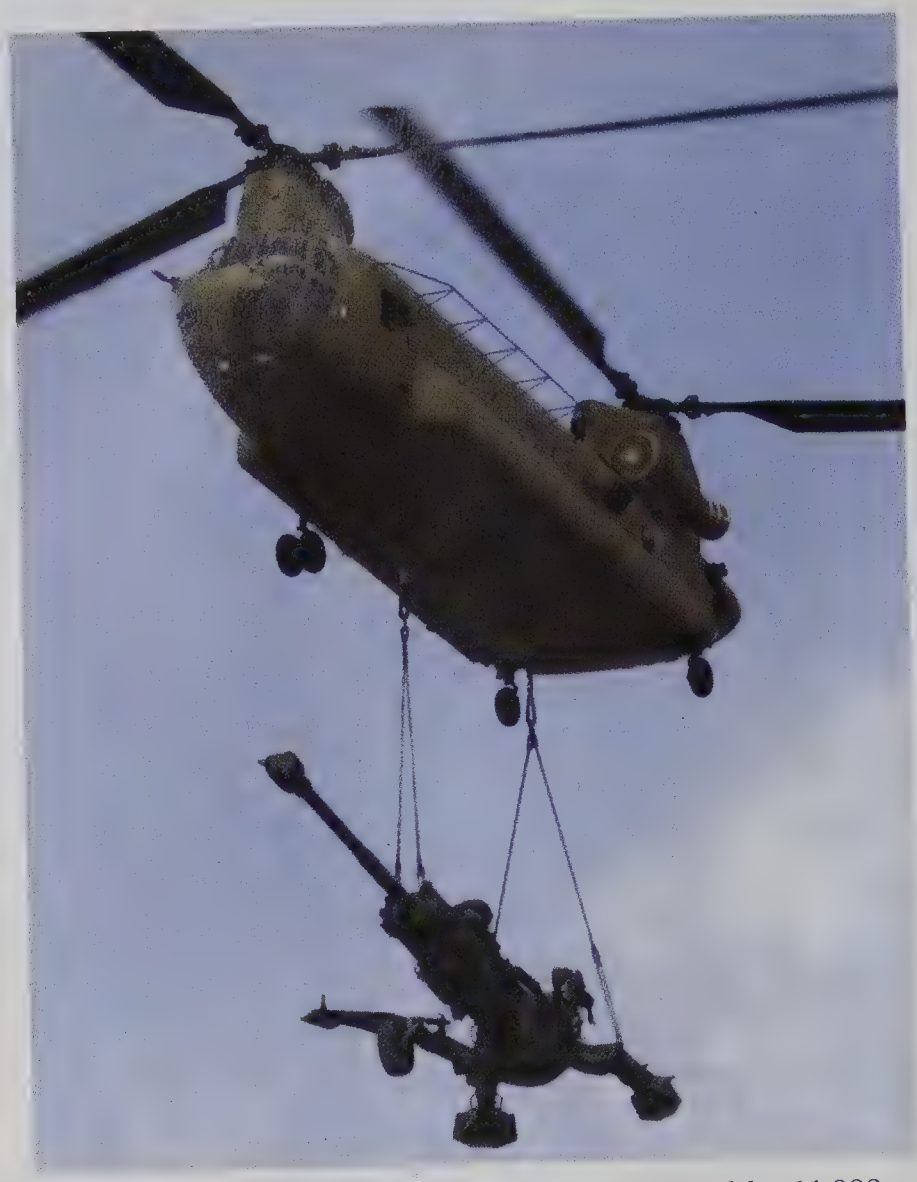
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A U.S. Army Chinook helicopter airlifts a 155 mm howitzer to FOB Shank as the 3rd BCT, 10th Mountain Division, takes up positions.

are also disturbing recent signs that it is currently expanding control east into the heart of Pakistan. Gen. Petraeus, in an open letter to CENTCOM personnel in December, stated that Pakistan "faces substantial difficulties of its own but has shown new awareness of the need to deal with the extremists who have not only exported violence outside Pakistan's borders but have also demonstrated the threat they pose to Pakistan's very existence."

Regardless of external problems that affect the situation in Afghanistan, the tactical situation there caused Gen. David D. McKiernan, ISAF commander and commander of U.S. Forces Afghanistan, to request additional forces several months ago. His request, subsequently endorsed by Gen. Petraeus and Secretary Gates, called for the additional deployment of some 30,000 American troops to Afghanistan. The first Army unit sent was the 3rd Brigade Combat Team (BCT) from the 10th Mountain Division (Light Infantry), previously set for deployment to Iraq but "re-missioned" for Afghanistan. In late January, the 3rd BCT began taking up positions in the eastern provinces of Wardak and Logar, a rugged area south of Kabul previously covered by only a battalion-size element.

"Our first steps are to get forces out into [the] more populated areas and begin to interact with the people," Col. David B. Haight, the 3rd BCT commander, said. Two more BCTs are scheduled to be in Afghanistan this spring and another by late summer, and they will be joined by the Army Reserve's 143rd Expeditionary Sustainment Command. A Marine battalion task force arrived in November and is tasked to train Afghan police. Counting additional support and combat enhancement personnel, such as unmanned air systems squadrons from the Air Force, the increase could put the U.S. contribution to ISAF at up to roughly 64,000, which is less than half the troop commitment to Iraq in January.

The increase, however, does not represent a "surge" in the same sense as it did in Iraq—an increase to be maintained for a specific period. It appears that the end number will be the sustained level of U.S. forces in Afghanistan for the foreseeable future, and perhaps it is the foreseeable peak. Secretary Gates said he would not side with calls for additional forces above the stated level at this point, telling the Senate, "I would be very skeptical about [deploying] force levels beyond what Gen. McKiernan has asked for."

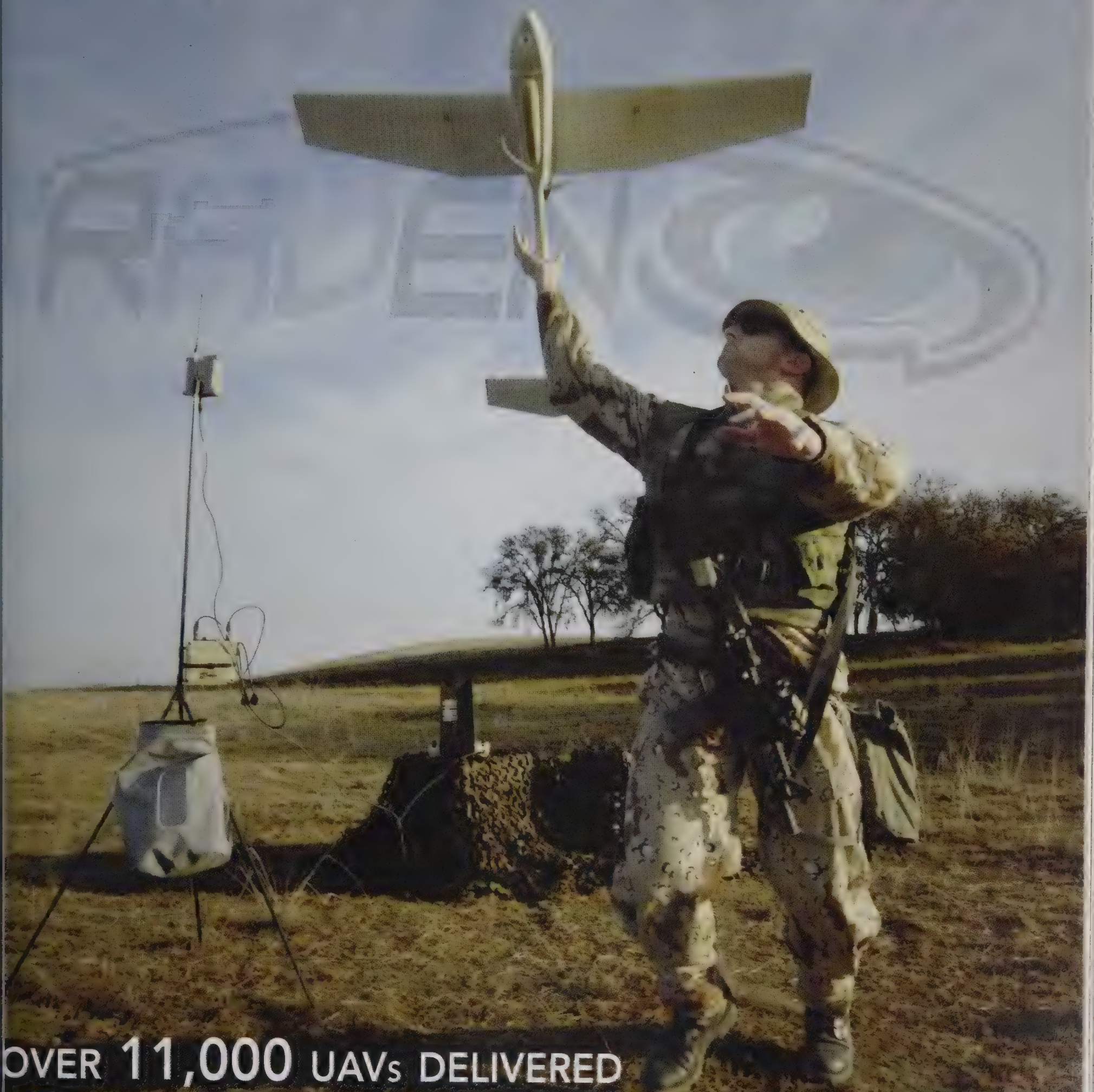
"There will be a requirement for sustained commitment here for some protracted period of time. How many years that is, and how many troops that is … nobody knows at



U.S. Forces Afghanistan

Vehicles and soldiers from Task Force Gladiator provide security for a U.S. Forces Afghanistan joint investigation team looking into reports of civilian casualties resulting from operations against the Taliban in Kapisa Province. American forces are quickly investigating and communicating findings stemming from collateral damage reports to counter allegations intended to incite the civilian community.

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Soldiers from the 506th Infantry, 101st Airborne Division (Air Assault), conduct a patrol in Afghanistan.

this point," Secretary Gates said during a visit to ISAF headquarters in December. A senior CIA officer during the Soviet invasion and occupation, he reminded the Senate during his testimony that "the Soviets couldn't win that war with 120,000 troops and a ruthless approach," adopting and adhering to "the wrong strategy."

President Barack Obama, leaving his first meeting with the Joint Chiefs of Staff at the Pentagon, said, "We're going to have some difficult decisions that we're going to have to make surrounding Iraq and Afghanistan. Most immediately, and obviously, our efforts to go after extremist organizations that do harm to our homeland is uppermost on our minds."

President Obama will need to approve the overall troop increase in Afghanistan.

Administration officials said a comprehensive strategy shift in Afghanistan would take into account recommendations from a study currently being done by Gen. Petraeus.



U.S. Forces Afghanistan

Col. Greg Julian, representing U.S. Forces Afghanistan, speaks with tribal elders as he investigates a civilian casualty report.

Afghanistan in many ways has been forgotten by the American public and shunned by policymakers since the March 2003 U.S. invasion of Iraq. With the endgame apparently being played in Iraq and the new Obama administration viewing Afghanistan with primacy, Operation Enduring Freedom is shedding its off-Broadway status in very pronounced terms. Secretary Gates, during his first congressional testimony as a member of the Obama administration, testified that Afghanistan is at the "absolute forefront" of strategy. During the past seven years, the strategic ground has shifted in Afghanistan. The stakes have skyrocketed, and tactical operations are welded to Pakistan's internal strife along with that between Pakistan and India, which extends to other parts of the region.

"It is not possible to solve the problems internal to Afghanistan without addressing the challenges, especially in terms of security, with Afghanistan's neighbors. A regional approach is required," Gen. Petraeus said in a speech to the U.S. Institute of Peace. "We have to demonstrate commitment to sustain comprehensive, coordinated approaches and build and execute a regional strategy that includes Pakistan, India, the Central Asian states and even the army in Russia along with … perhaps at some point Iran."

Applying first aid to Afghanistan to stop the bleeding also buys time for American special envoys and diplomats to gain traction with the greater challenges of regional stability. Under the severe, unforgiving and often volatile gaze of *realpolitik*, the Afghanistan situation—now unequivocally and permanently grafted to the hydra head of the Pakistan domestic situation/Pakistan-India hostility and repercus-



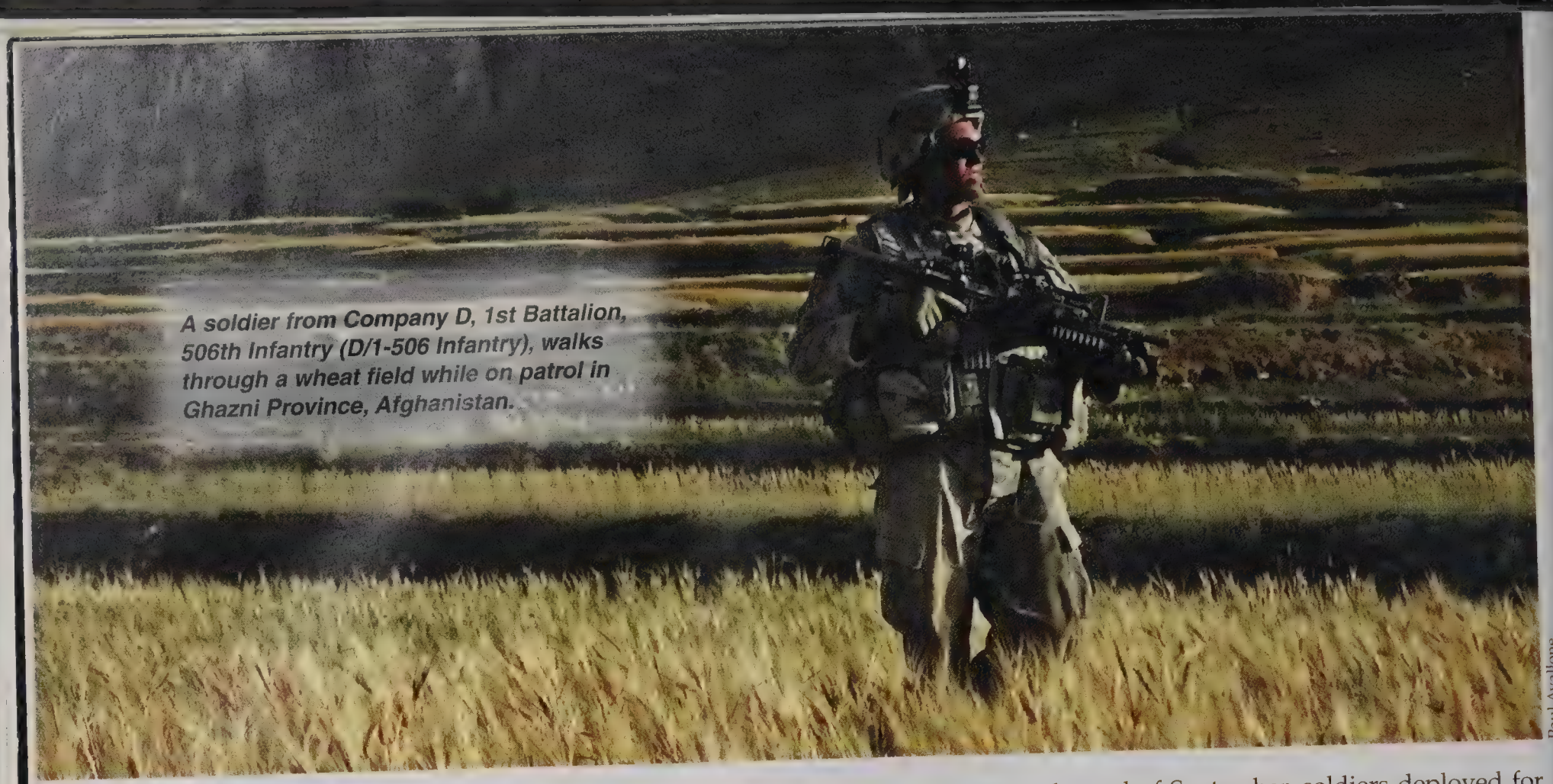
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A soldier from Company D, 1st Battalion, 506th Infantry (D/1-506 Infantry), walks through a wheat field while on patrol in Ghazni Province, Afghanistan.

Paul Avallone

sions beyond—makes Iraq look like small potatoes.

Before the additional deployments began, the U.S. contribution to the NATO mission in Afghanistan represented about 34,000 of the roughly 70,000-troop NATO presence. Requests for more troops from other NATO countries have been made often and received little hope. Opposition to the war in Afghanistan is growing within European countries—a domestic hurdle that many NATO countries find they cannot leap.

President Obama will meet with NATO leaders in April, bringing renewed troop requests and requests that participation caveats against offensive combat employment by some contributing countries be removed or altered. He also will ask for increases in economic and construction contributions from NATO partners.

Reconstruction has not been abandoned in Afghanistan. Security has priority, given the circumstances, but Gen. McKiernan said the overall effort in Afghanistan will require more than additional troops. "It's going to require governance, it's going to require security for the people, and it's going to require the continued support from the international community on reconstruction and development," he said in September 2008.

Army officials believe that the remainder of the Afghanistan combat unit increase this year can be met without significant diversion from Iraq's deployment flow. The problem is assembling the combat-support and combat-service-support units to meet additional needs in Afghanistan. At some point, however, there must be a decrease in U.S. troop strength in Iraq to sustain BCT rotations into Afghanistan at the new level while meeting plans for increased unit dwell time between deployments. Secretary Gates told legislators that by the end of September, soldiers deployed for 12 months should expect 15 months at home. By October 2010, the plan is to allow 24 months between deployments, and by late 2011, the dwell time is expected to reach 30 months.

The American troop increase also could require thousands of additional mine resistant ambush protected (MRAP) vehicles to be delivered to Afghanistan to help protect U.S. soldiers from the elevated IED threat. (Requests have been made for a lighter MRAP version to better maneuver along Afghanistan's primitive—at best—road system.)

Meanwhile, plans and funding are in place to increase the 80,000-soldier Afghan National Army by 50,000 soldiers, but Gen. McKiernan said it will be three or four years before the army can be trained and operate independently. The American troop increase will include additional trainers.

Secretary Gates said that it is important to put "an Afghan face" on the conflict and have Afghan—rather than American—soldiers kick down doors. He also said that it is imperative that NATO start winning the communications war, especially to stem angry reactions to civilian deaths resulting from NATO air attacks.



A D/1-506 Infantry soldier takes up position in a doorway as his unit enters an Afghan village.

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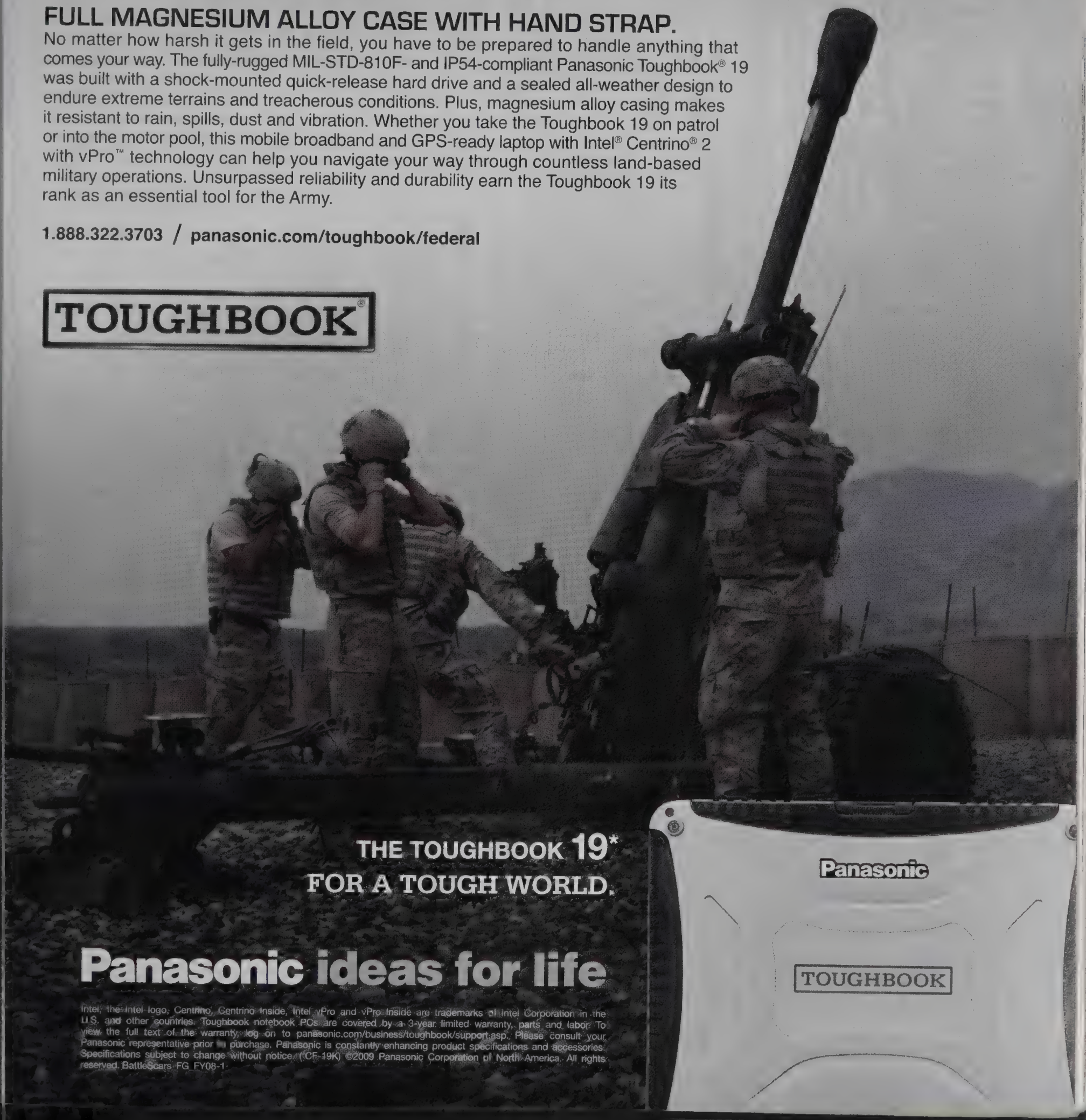
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U.S. Forces Afghanistan

Afghan tribesmen gather around an American team sent to investigate collateral damage reports.

Meanwhile, a plan to create "public guards"—administered by Afghanistan's Interior Ministry—by drawing volunteers from tribes to protect themselves from the Taliban and others along the lines of the Sons of Iraq has been met with disputes and controversies, and a pilot program has been delayed.

ISAF is divided into five regional commands. Regional Command (RC) South is in the most trouble, and American brigades that will arrive this spring and summer are expected to be assigned to RC South. Kandahar is the main ISAF base in the south, and the region currently is held by a 20,000-strong force of Canadian, British and Dutch troops. A force of that size is not sufficient for the task; vast areas have no ISAF presence.

Currently, RC South's portion of the border with Pakistan cannot be sufficiently patrolled; villages cannot be protected. A hundred-mile stretch of opium-poppy fields cannot be watched. Afghanistan's fields provide up to 90 percent of the world's opium, which is later refined into heroin, and the United Nations estimates that the Taliban derives a $300 million income annually from that opium.

RC South is also the Taliban's home field, encompassing the major Pashtun region of Afghanistan. The Pashtuns represent a collection of tribes and clans that share a common language, culture and strict adherence to an honor code handed down through the centuries. Among principal tenets of the code is the absolute requirement to seek vengeance for a wrong, regardless of whether it was done the day before or generations ago. Pashtuns, as *mujahedeen*, strongly resisted Soviet occupation. As the Taliban was, and remains, primarily a Pashtun movement, it is in the south that the Taliban has its greatest presence and influence—and the greatest connection to and support from Pashtun tribes in Pakistan's Federally Administered Tribal Areas and North-West Frontier Province. These adjacent regions brace the border with Afghanistan and are considered virtually uncontrollable by Pakistan's central government. British mapmakers divided the Pashtuns between Pakistan (then still part of India) and Afghanistan when the current border was drawn in 1893, a Western administrative measure largely disregarded by the Pashtuns, and which was made enforceable as a practical matter in 1919, when Afghanistan was allowed to conduct its own foreign affairs. Still, it remained no more than an ink squiggle to the Pashtuns.

The Taliban movement exists as a third level of effect from the Soviet occupation. Many Pashtuns crossed into Pakistan during the war against the Soviets, living in large refugee camps. Aid from other Islamic states supported the camps, including schools established in them. Most schools adhered to strict Islamic teaching because wealthy Wahhabists from Saudi Arabia paid for them. Wahhabists advocate a return to the Islamic culture and laws practiced by the first three generations of Islam. To say they are fundamentalists is not going far enough. The Soviet pullout left civil war and raging chaos in Afghanistan. The Taliban (which can be translated as "the students" or "the seekers") was formed by students from those schools, and they returned to Af-



U.S. Army

Spc. Brett Devlin from the Army National Guard's 33rd Infantry Combat Team passes civilians lining a road in Kabul during a presence patrol.

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Paul Avallone

PFC Ariel Mora, 2nd Battalion, 506th Infantry, and his fellow squad members form a perimeter while patrolling an open area in Afghanistan.

ghanistan to reestablish order under its interpretation of Islamic law.

The Pakistani government—primarily through its strong Inter-Services Intelligence (ISI) directorate, which assisted the *mujahedeen* and the CIA in its support for the *mujahedeen* during the Soviet occupation—encouraged and supported the Taliban for several reasons: first, as a way to stem the violence in Afghanistan without overtly committing Pakistani forces; second, accomplishing that would reopen important trade routes from Pakistan and bolster its own economy; third, it would keep Pashtuns dominant in the south, serving as a Sunni Islam buffer zone between Pakistan and Shia Islam Iran. And, by the way, Pashtuns are well represented in the ranks of the ISI; there are allegations that the ISI still supports the Taliban.

The Taliban/al Qaeda connection is an extension of their *mujahedeen* connection (al Qaeda initially was composed primarily of foreign *mujahedeen* veterans and supporters, including Osama bin Laden), linked by common Islamic fundamentalism and stands against Israel and the West in general. Afghan tribes usually fight each other and coalesce only when their blood rises to fight invaders, especially invaders who become occupiers. Many puppets and potentates have been seated by outsiders and failed.

There is little Afghan nationalism outside common defense and little taste for a central government. Tribes are fiercely independent and find they are quite capable of self-government to the extent they need governing. They traditionally will accept a central paymaster, however, and a weak government that doesn't threaten them or try to make them do things they don't find agreeable.

Afghanistan's current president, Hamid Karzai, reelected in October 2004, extends little power beyond the government compounds in Kabul, and even there it is often contested. Several former ministers vehemently oppose him. Many Afghans see him as a willing player or a pit boss in the country's staggering corruption, and he is experiencing a severe confidence recession in the West. He faces strong challengers in the new round of elections, currently scheduled for late August after a four-month delay to improve security.

Afghanistan's economy is practically nonexistent; the country is among the poorest in the world. It remains a land of tinker workshops and donkey paths. Priority reconstruction programs have fixed some major roads and built new roads and bridges, but the work has brought Afghanistan only to within sight of a starting point. A good primary road system from border to border to facilitate trade, however, would put it in position to start earning some revenue if banditry can be held in check.

Afghanistan's traditional value has been as a transit point and buffer zone. One historian said that it lost most of its value when "the world became round instead of flat"—that is to say, when global sea transit was established and there was no need to cross it.

Historically, Afghanistan has offered little value of its own; no treasure, products or natural resources that anybody wanted. Those things have always existed on the four sides of Afghanistan: China to the east, Persia and Europe to the west, Russia to the north and India to the south. Routes crossing Afghanistan, however, have been its main asset and greatest woe. For thousands of years, armies tromped across Afghanistan to get at bordering riches and greater glory, generally pausing in Afghanistan only to slaughter or be slaughtered.

The British Empire tried twice to tame Afghanistan in a struggle against Russia dating from the 1840s, often referred to as the "Great Game" and filled with intrigues and maneuvering. The British suffered bloodbath and disgrace in their first Afghanistan war. The second war primarily was initiated as punitive action for the indignities of the first. With Russian interest and capability in the region downgraded, the British basically found Afghanistan not worth the cost in casualties or fortune and headed south for the better comforts of its *raj*. They returned during World War I, but real purpose was lacking, and their hearts weren't really in it other than to affirm the political boundary.

Secretary Gates, a historian, noted Afghanistan's great claim to glory during his Senate testimony, using the contemporary phrase that has come to symbolize its morbid history as a reason for caution, reminding all that it is the "Graveyard of Empires." Committed to Afghanistan, the Obama administration must now engineer a way to escape that fate. ★

In confrontations on the future battlefield, what is scarier than inferior technology is inferior thinking.

—Deng Yifei, "Realizing a Historic Leapfrog in Military Thinking Mode," *Guangming Daily*, January 17, 2008

Transformation? Or Reclamation?

Organizing to Win The War We Have *and* Those We May Have Yet to Fight

By Col. Gregory Fontenot
U.S. Army retired
and
Col. Kevin Benson
U.S. Army retired

Among the many enthusiasms of the defense community, reorganizing the Army is near the top of the list. Chief among the arguments calling for Army reorganization is the assertion that the Army has largely remained unchanged since the end of the Cold War and, more importantly, seeks to preserve the "legacy" forces at the expense of "leaner," more agile forces better suited for the kind of war the United States will face in the future.

Assertions and assumptions abound that suggest that warfare is forever and irrevocably changed as a consequence of the global war on terrorism. Pundits, scholars and servicemembers of all branches are counting generations of warfare or transformations. In his 2004 book *The Sling and the Stone*, Thomas X. Hammes claims we are in a fourth generation of warfare. After the initial invasion of Iraq, the Russians asserted that the United States aimed at nothing less than "contactless battle," which some of them suggest they achieved in Georgia. MacGregor Knox and Williamson Murray, who produced one of the better tomes that set out to count and illustrate "revolutions in warfare," argued in 2001 in *The Dynamics of Military Revolution, 1300–2050* that five military revolutions in Western history have fundamentally changed the "framework of war."

Perhaps they will want to revisit their assessment now, but frankly there seems to be no compelling reason why they should. The essence of their argument is that these events are "earthquakes" that result in fundamental "systemic changes in politics and society." Regarding irregular warfare, that assessment is not yet possible, thus it is not yet a fourth generation of warfare, let alone a sixth revolution in military affairs. One of the problems with various arguments over how to transform the Army is that the taxonomy used to frame these discussions is not helpful. Whether there are *generations of* warfare or *revolutions in* warfare is not particularly relevant, nor is the question of venue or domain in which the "fight" must occur—*soft power, going kinetic, distributed operations, oil spot, interagency* and any number of euphemisms produce confusion, not clarity. War is an extension of policy. Thus this "new" form of warfare is only "certain" if the United States seeks out conflicts that require occupation followed by counterinsurgency or whether it chooses to support surrogates that are waging counterinsurgency. This begs the question of under what conditions and for what reasons the United States would choose intentionally to intervene in a case requiring counterinsurgency as the chief consequence of intervention.

Still, among some commentators there is an aura of certainty that irregular warfare or unconventional warfare as waged currently is new and that the United States must look forward to conducting such warfare exclusively. Among the less radical in this group are those who admit, however reluctantly, that conventional warfare remains a possibility, but a remote one. Fair enough: It does seem unlikely that the United States will confront a peer competitor in the near future, so arguing about what must be done in the absence of that condition is reasonable.

It is unlikely, however, that the end of history has occurred. Analogies between the wars in Iraq and in Vietnam and the American versus the Soviet experience in Afghanistan are inherently flawed for a number of reasons. These run the gamut from the fundamentally different conditions, which some pundits claim require a new way of seeing the nature of warfare generally, to the equally profound differences in the ends and means used in Vietnam, Iraq and Afghanistan.

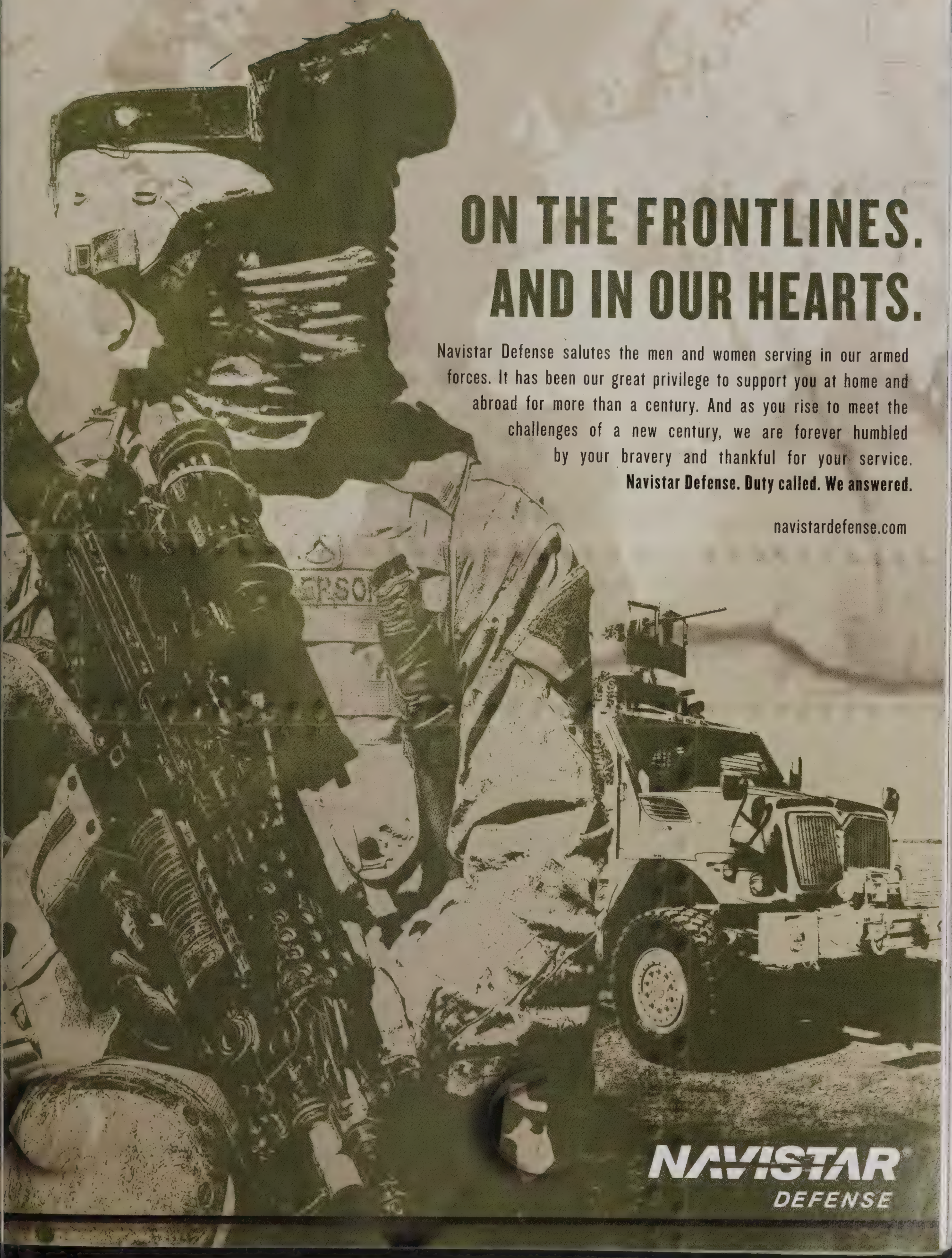
In "Learning from Conflicts to Prepare for Future War," published in the fall 2008 volume of *Orbis*, H.R. McMaster argues that, first and foremost, the United States must "improve dramatically the quality of our thinking about war. Understanding the continuities as well as changes in the character of armed conflict will help us make wise decisions about force structure, develop relevant joint force capabilities, and refine officer education and the organization, training and equipping of our forces." McMaster argues that however unlikely conventional warfare seems, the United States must "retain and expand its ability to deter, coerce or defeat nations that threaten U.S. vital interests or attack those vital interests through proxies." A veteran of Operation Iraqi Freedom, McMaster is mindful that U.S. capability to operate anywhere along the spectrum of conflict requires improvement in the joint forces' capability to conduct "a wide range of missions, including interdiction of terrorists' movement and support; raids against leadership and support bases; and counterinsurgency, peace support and state-building operations in places like Afghanistan, Iraq and other areas that terrorists would like to use as bases of operation."

The essence of McMaster's argument is that the current structure and approach to training and equipping the force is based on false assumptions about the advantages of "knowledge-centric" warfare, which has dominated—and to a large extent still dominates—the thinking of defense analysts and the Defense Department and is based on mistaken assumptions about the capacity of technically sophisticated sensors to enable joint forces to see first, understand first and act first. This, coupled with the astonishing success of U.S. forces in Operation Desert Storm, led to reliance on precision munitions that led to "effects based operations" and an assumption that all wars would be short and the United States would win them.

In some ways, McMaster suggests that this conviction and confidence in short decisive wars drove policy. A more thoughtful assessment of the limitations of U.S. capability would have resulted in a different policy and fewer decisions to substitute technology for people. As the Chief of Staff of the Army, Gen. Eric K. Shinseki led the Army in a

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COL. GREGORY FONTENOT, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he concluded his career in 1999 as commander of the Battle Command Training Program. He is coauthor of On Point: The U.S. Army in Operation Iraqi Freedom *and is currently director of the University of Foreign Military and Cultural Studies. COL. KEVIN BENSON, USA Ret., served as director, School of Advanced Military Studies, and as the director of plans, C/J-5, Combined Forces Land Component Command and Third U.S. Army at the opening of hostilities in Iraq, from 2002 to 2003. He works for McNeil Technologies and is currently a seminar leader at the University of Foreign Military and Cultural Studies.*



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bold effort both to take advantage of technology and to train an Army capable of operating along the spectrum. Even as he did so, however, he cautioned leadership to be wary of a "12-division strategy with a 10-division Army." Gen. Shinseki's "transformation" effort absolutely depended on technological innovation and on joint integration, but despite his commitment to both, he understood that no matter how the Army is structured and equipped, a strategy beyond its means could be devised. And the Bush administration did just that.

It is useful to recall that the image of the collapse of South Vietnam did not culminate with insurgents clad in black pajamas seizing the presidential palace. Instead, a T-55 tank rumbling through the gates of the palace provides the compelling image of victory for the North.

In his criticism of Gen. Shinseki's objective force, built on Future Combat Systems (FCS), McMaster does not limit himself merely to asserting that a knowledge-centric force was the wrong way to go. Instead, he offers recent cases to extend the argument based on "data." McMaster cites examples from the initial invasion of Iraq, but his major case includes Operation Anaconda, conducted in 2002, and the Israeli invasion of Lebanon in 2006. In Iraq, Afghanistan and Lebanon, countermeasures and friction more than offset assumptions made by the United States and Israel about the efficacy of sensors and precision munitions against irregular forces. McMaster's chief arguments are based in large part on work done by Stephen Biddle.

In *The 2006 Lebanon Campaign and the Future of Warfare: Implications for Army and Defense Policy*, Biddle and coauthor Jeffrey A. Friedman conclude that Hezbollah fought not as a "classical guerrilla army: It put too much emphasis on holding ground … but neither did it approximate a pure conventional … defense." Biddle and Friedman actually draw few conclusions, but this central one—that Hezbollah's actions in 2006 defy convenient pigeonholes—is very important.

Fundamentally, what Biddle and Friedman found is that Hezbollah fought to retain ground that it needed, and many Hezbollah troops wore uniforms and fought with decent conventional tactical skills. Furthermore, Biddle and Friedman learned that the Israelis had sacrificed training for conventional operations and paid the price for their conviction that precision munitions in support of ground forces would enable them to win.

Concerning the United States, Biddle and Friedman convincingly argue that the question of whether the U.S. Army should develop a structure that is optimized for the wars we have rather than those we *might* have to fight suggests a dichotomy between conventional and unconventional wars or regular and irregular wars that does not serve the United States well. "*The distinctions* [between conventional and unconventional wars] *are differences in degree, not kind.*" Thus they conclude that the "difference between 'guerrilla' and 'conventional' war making is not well-treated as a dichotomy, but is more accurately described as a continuum."

Biddle and Friedman are correct. The apparent differences between the retaking of Ramadi from the insurgents in 2006 and the "Thunder Run" into Baghdad in 2003 are difficult to discern. Tanks and Bradleys proved essential in both cases, as did combined arms operations that would not have looked particularly unusual to troops fighting in Saint-Lô in 1944. McMaster's assessment is similar to that of Biddle and Friedman: "Post-9/11 experience highlights the enduring uncertainty of combat and the need for balanced air, ground and maritime forces that can both project power from a distance and conduct operations on the ground to defeat the enemy and secure critical terrain."

In Afghanistan in 2002, al Qaeda felt compelled to defend the Shah-i-Kot Valley because it contained—as it did during the Soviet-Afghan war and during Afghan civil war—a base of operations crucial to their capacity to fight; defending the valley provided an opportunity to inflict casualties on Coalition forces. In his soon-to-be-published book *The Coils of Anaconda*, U.S. Army Foreign Military Studies Office analyst Lester W. Grau notes that al Qaeda had used the valley and the limited infrastructure present there, at least since 1993, as a site where their families could live and from which al Qaeda could mount operations in their support of the successful Taliban effort to seize Afghanistan. In 2002, as the Taliban collapsed, many al Qaeda fled toward the Shah-i-Kot while their families crossed the border into Pakistan. In March 2002, perhaps as many as 500 or more of them—with some Taliban—occupied conventional defenses previously prepared when the valley had served as their base, hoping to inflict sufficient American casualties to produce a Somalia-like withdrawal.

The defenders were dug in, camouflaged and supported by air-defense weapons ranging from machine guns and SA-7 shoulder-fired surface-to-air missiles to an S-60 and considerable artillery, including mortars and at least 10 howitzers and guns. Their defensive network hemmed the valley and effectively covered the major avenues of approach with interlocking fires. Several of these positions offered keyhole shots into the flanks of approaching forces. Having learned their lessons well, they positioned their air defenses below the crests of the ridges on the "military crests." In short, the al Qaeda fighters planned a conventional mountain defense of critical terrain and subsequently demonstrated their willingness to fight.

The Coalition opposition that al Qaeda faced included



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largely ad hoc formations composed of units that had not trained together, and the entire force depended on air support as the chief fire-support system. Operation Anaconda has been used to make any number of arguments with great passion. The Air Force and the Army have each used that experience to argue parochial points of view. Many soldiers have claimed that Anaconda demonstrates the requirement for Army direct-support artillery. Perhaps, but it is also hard to prove that the U.S. forces in Afghanistan could have sustained artillery in support of that fight. It is possible to make either the Army or Air Force case based on Anaconda. What Anaconda cannot validate is the argument that the United States does not need well-equipped conventional forces capable of high-intensity combat operations.

In Iraq, Afghanistan and Lebanon, irregular forces turned to conventional defenses when it suited them or when they felt compelled to defend terrain vital to their own operations. This lesson is generally forgotten by the counterinsurgency enthusiasts. In each of these countries, at one time or another, conventional "legacy" units either proved decisive or at least necessary, if not sufficient, to turn the tide at the tactical level. For that matter, it is useful to recall that the image of the collapse of South Vietnam did not culminate with insurgents clad in black pajamas seizing the presidential palace. Instead, a T-55 tank rumbling through the gates of the palace provides the compelling image of victory for the North.

What, then, is the right answer for how to structure, equip and train? Is the Army right or at least mostly right in taking today's approach of forming several kinds of maneuver brigade combat teams—Stryker, infantry and heavy? Stryker brigades have three fully capable maneuver battalions designed to fight if need be but that are certainly capable of patrolling, separating hostile factions and providing humanitarian support in permissive environments. The remaining brigade combat team formations are organized around two maneuver battalions banking on the as-yet-unrealized benefits of emerging FCS technology.

But if Biddle and Friedman and McMaster are correct, how the brigades are organized is not as important as how they are trained to operate. Their technology, their weapons and their structure will not, in and of themselves, ensure utility either in unconventional or conventional operations. There is little evidence to support the conclusion that armies that structure forces specifically to do counterinsurgency or humanitarian support produce better efforts. For that matter, there is not much evidence of armies actually having structured exclusively for those kinds of missions.

Today, in an environment that is more ambiguous than the Cold War but apparently not much less dangerous, the United States and its allies have not reached a strategic consensus. Moreover, giving up forward bases in return for a "peace dividend" while pushing NATO east has not necessarily enhanced the United States' global strategic position. The structure to cope with the threats and how the force should be equipped comes down to two things—balance and policy.

When both terrorists and those representing more "traditional" threats are able to wage war either conventionally or unconventionally, balance is essential. The United States will require special-purpose forces and general-purpose forces able to operate anywhere along the spectrum of military operations. The single most important consideration in designing the right forces is to determine what the overarching policy of the United States will be vis-à-vis potential threats. Will the United States continue to eschew forward basing for "expeditionary" capability? If this idea is to be taken seriously, then deployment capacity must keep pace with the rhetoric of rapidly deployable forces. Gray hulls and airframes speak louder than words. Will the United States build specialized forces symmetrical to an irregular opposition? Why would the U.S. Army exclusively build purely light infantry capability? Tactically survivable mobility does not preclude motorized or mechanized infantry from operating effectively as infantry. Finally, fixed structure at brigade level does not ensure adaptability.

The structure to cope with the threats and how the force should be equipped comes down to two things—balance and policy.

Training and education endow soldiers and units with adaptability. Recent evidence, such as there is, seems to suggest that retaining significant conventional combat capability is desirable. How the forces are trained will not in and of itself ensure adaptability either. For the armed forces to truly serve the needs of the nation effectively, strategic clarity of thought is necessary and is arguably the key to developing an agile and adaptable joint team—and in that context, an agile and adaptable U.S. Army.

In a recent essay in *Foreign Affairs*, "A Balanced Strategy," Secretary of Defense Robert M. Gates wrote, "To truly achieve victory as Clausewitz defined it—to attain a political objective—the United States needs a military whose ability to kick down the door is matched by its ability to clean up the mess and even rebuild the house afterward." This illuminating essay points the way forward for upcoming U.S. security strategy. As Gates proposes that while "not every outrage, every act of aggression, or every crisis can or should elicit a U.S. military response," the nation cannot afford to forget the cold calculus of war: that once committed to battle, the military must have the ability to track "enemies down hilltop by hilltop, house by house, block by bloody block." Gates advocates a balanced strategy, and Army general-purpose forces, well led and well educated, offer the best possibility of attaining balance in an uncertain world. ★



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Decentralized decision making and execution is shifting to four core enterprises: personnel, readiness, materiel, and services and infrastructure. This four-pronged structure fosters flexible processes to ensure greater responsiveness. The materiel enterprise and the structures created to serve the enterprise are enabling better planning, increased speed, essential integration and a greater awareness of our capabilities from concept to combat.

The more inclusive viewpoint offered by the Army enterprise is the most effective and efficient means to sustain



Transformation

U.S. Army/SFC Edwin Ortiz

By Gen. Ann E. Dunwoody

our joint forces and generate trained and ready units while improving quality of life for our soldiers and their families.

The U.S. Army Materiel Command (AMC), in partnership with the Assistant Secretary of the Army for Acquisition, Logistics and Technology [ASA(ALT)], is now viewing research, acquisition, logistics and technology through an enterprise lens, which offers a holistic view of the entire process. As the materiel enterprise gains momentum, AMC is continuing the transformation by helping our life-cycle managers adapt, creating the conditions for better decisions, recalibrating our strategic objectives, encouraging a shift to a cost culture and ensuring organizational governance.

Understanding Scope and Scale. If we are to change our way of thinking, it is helpful to understand the scale and scope of our enterprise. Compare the Army Materiel Command to a multinational corporation: With 61,000-plus employees, an additional 78,000 contractors in Southwest Asia, a $47 billion budget and $104 billion in contract obligations, AMC would rank 49th among Fortune 100 companies.

AMC has major operations—depots, arsenals, laboratories and installations, as well as access to ports and terminals—in 149 locations. The organization's footprint is a sprawling network that includes 36 states and maintains or supports operations in 55 countries.

By including the Office of the ASA(ALT)—led by Dean Popps, with its budget of $34.4 billion—the materiel enterprise moves into the upper echelons of corporate rankings. When considered together, ASA(ALT) and AMC have a total budget of more than $81 billion—a sum that places the materiel enterprise in the upper quartile, close to number 22, on the Fortune 100 ratings table.

Viewed collectively, the Army's research, acquisition, logistics and technology capabilities are formidable, but the sheer scale of our organizations demands that we become more efficient in the way we do business. Our global mission, multinational responsibilities and transregional supply chains describe a macroenvironment that is leading us in the direction of strategic unity of purpose.



Rail-yard workers load heavy equipment from 3rd Brigade Combat Team, 101st Airborne Division (Air Assault), onto railcars at Fort Campbell, Ky., to be shipped to Iraq.

U.S. Army/Larry Noller

Toward Institutional Adaptation. This unified thinking is driving improvements in how we execute Army force generation (ARFORGEN), the process through which we build and generate combat power. These improvements are also dependent upon rethinking long-held assumptions and taking a series of important steps, the first of which is adapting the reset model we use for institutional support of the ARFORGEN process. The next step is fully embracing an enterprise approach and, at the same time, developing an Army-wide strategic management system that incorporates a refined governance process supported by improved assessment architecture.

The adaptation of new processes is accompanied by reforming of requirements coupled with more responsive resource procedures. These enterprise-driven steps toward institutional adaptation also help to inculcate a cost culture that rewards good stewardship. Installing the right structures and more responsive processes is leading to a necessary cultural shift.

Changing Strategic Objectives. As a strategic framework, the materiel enterprise provides a core component designed to improve both the effectiveness and efficiency of the Army, align our institutions to support the Army of the 21st century and preserve our all-volunteer force.

Materiel enterprise offers a clear view of the business of the Army. The enterprise approach is gaining traction and is now yielding positive and measurable results in resource allocation and workload management. It is time to look beyond the good performance picture and the forecasts of improving metrics, however. The enterprise approach enables our acquisition experts, logisticians, researchers and scientists—as well as Army leaders at all levels—to make better-informed, more cost-effective short-, mid- and long-term decisions. These better decisions will define transformation.

Visualizing the Materiel Enterprise. Clearly, we have a range of key choices to make, critically important priorities to set and enormous opportunities to seize. The transformation is now under way.

The challenges we face grow more complex and the stakes ever higher. There is no evidence that this era of persistent conflict in which we operate is ebbing. Our soldiers can always count on the unwavering support of Congress. But we cannot deny the relentless, rapid-fire changes shaping an emerging global reality—a new administration, a reposturing of forces as we move from a drawdown in Iraq to a buildup in Afghanistan, the possibility of diminished funding levels—evolving within an environment of asymmetric warfare.

With these ever-shifting conditions as a backdrop, the evidence leads us to clear conclusions.

- The inclusive materiel enterprise—as a strategic platform and set of operational directives—is the right decision for the Army.
- *Inclusiveness* is critical. ASA(ALT) and AMC, along with all institutional stakeholder Army organizations with core functions that affect the delivery of materiel, support the enterprise.
- Our organizations are coordinating their efforts to achieve shared goals as never before. The result is total lifecycle management in its truest sense—built on the full integration of acquisition, research and development, technology, and the materiel we deliver to the battlefield.

GEN. ANN E. DUNWOODY is the commanding general of U.S. Army Materiel Command (AMC). She served as AMC's deputy commanding general from June to November 2008 and was previously the Deputy Chief of Staff, G-4.

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Afghan National Air Corps maintainers repair an MI-35 Hind helicopter at the Kabul International Airport flightline in Kabul.

U.S. Air Force/Tech. Sgt. Cecilio M. Ricardo Jr.

■ This new level of collaboration also enables us to provide superior materiel solutions and state-of-the-art technologies and equipment for soldiers and civilians in theater.

■ The materiel enterprise will create extraordinary opportunities to support, enable growth and restore balance to the Army.

■ At the same time, the Army will play a role in sustaining and reenergizing the industrial base that is essential to safeguarding America. In theater, this commitment takes the form of robust forward capabilities, Army prepositioned stock, and amplified support for heavy brigade combat teams and Infantry brigade combat teams.

With the enterprise approach gaining ground, we are now applying the appropriate business disciplines to the Army. This means making decisions in a wider context and providing our Army's leadership with the very best information.

Thinking Through 'Continuous Reset.' Recently, Secretary of the Army Pete Geren and Army Chief of Staff Gen. George W. Casey Jr. identified the need for continuous reset—as opposed to intermittent action or reset as a transitory solution. Reset prepares forces for future deployments, including rebuilding readiness, tasks required to reintegrate soldiers and families, and all actions to organize, staff, equip and train a unit.

The Secretary of the Army and Army Chief of Staff declared their intention to adopt the enterprise model as a means to encourage an integrated approach to sustaining our Army. Attaining Gen. Casey's centerpiece goals requires that we make enterprise thinking the Army's new standard in which everyone is a stakeholder and all are accountable to help rebalance the Army.

One of the central tasks that AMC has undertaken is the alignment of acquisition, logistics and technology with the vision of the Army enterprise described by Secretary Geren and Gen. Casey. To realize this vision, we are working to deepen our partnerships.

Creating new, complementary processes and governance is a massive operational, organizational and cultural undertaking. The shift is substantive and is paying dividends. The life-cycle management commands (Tank-automotive and Armaments, Communications-Electronics, Aviation and Missile, and Joint Munitions and Lethality), including their aligned program executive office partners, continue to register impressive numbers. The life-cycle management commands' record of improving performance dates back to 2003—the start of reset.

The demands of reset require that the Army repair, replace and recapitalize its equipment. As we reset equipment and units, we must also synchronize the timing of reset with new requirements as defined by ARFORGEN and updated Army regulations. Not only must we return units to predeployment levels of equipment readiness, but we must also either equip them at the standards required as part of the modular Army or posture them to return to combat.

In fiscal year (FY) 2008, AMC reset 33 brigade sets of equipment; we project doing the same in FY 2009. In our current funding environment, the questions we might pose are: How efficiently did we accomplish that reset without a fully evolved enterprise view? Will we be able to achieve higher levels of efficiency and even better stewardship of taxpayers' dollars with the benefit of the steady adaptation of enterprise-inspired thinking and innovative management?

Tightening Our Business Practices. What happens when shared strategic goals and a cost culture begin to take root? As with reset, measurable, scalable achievement levels are rapidly elevated. Best practices are rapidly transmitted across the enterprise and cost-savings "multipliers" are achieved.

Through aggressive Lean Six Sigma programs, the Army's performance is now equal to or better than our industry partners in some key areas. We have earned the prestigious Malcolm Baldrige National Quality Award, 23 Shingo Awards and numerous International Organization for Standardization certifications. This broad recognition

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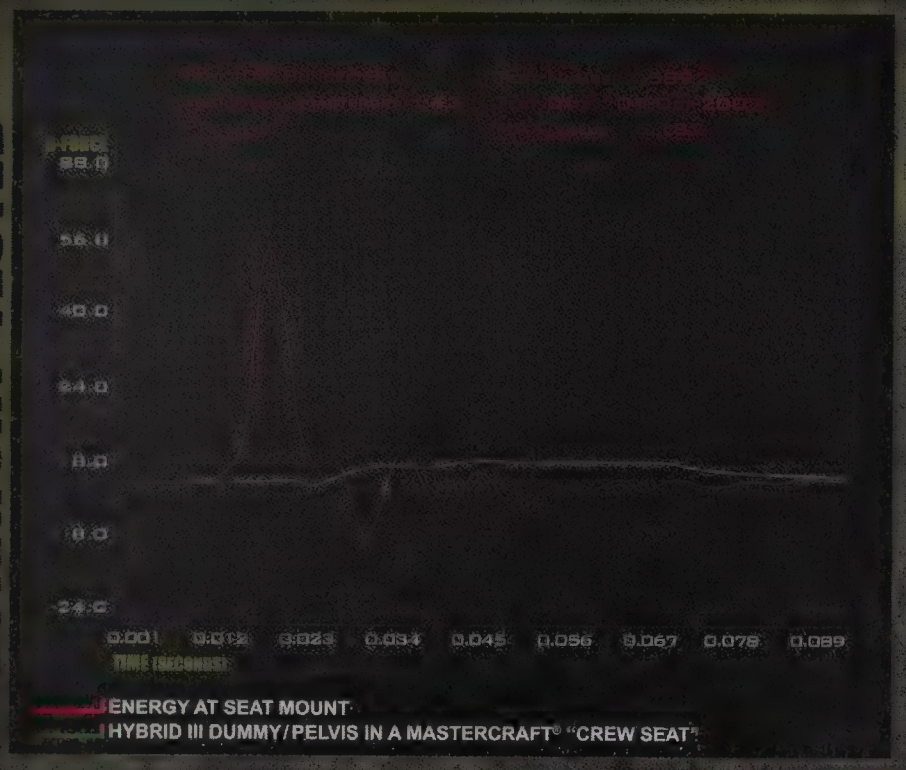


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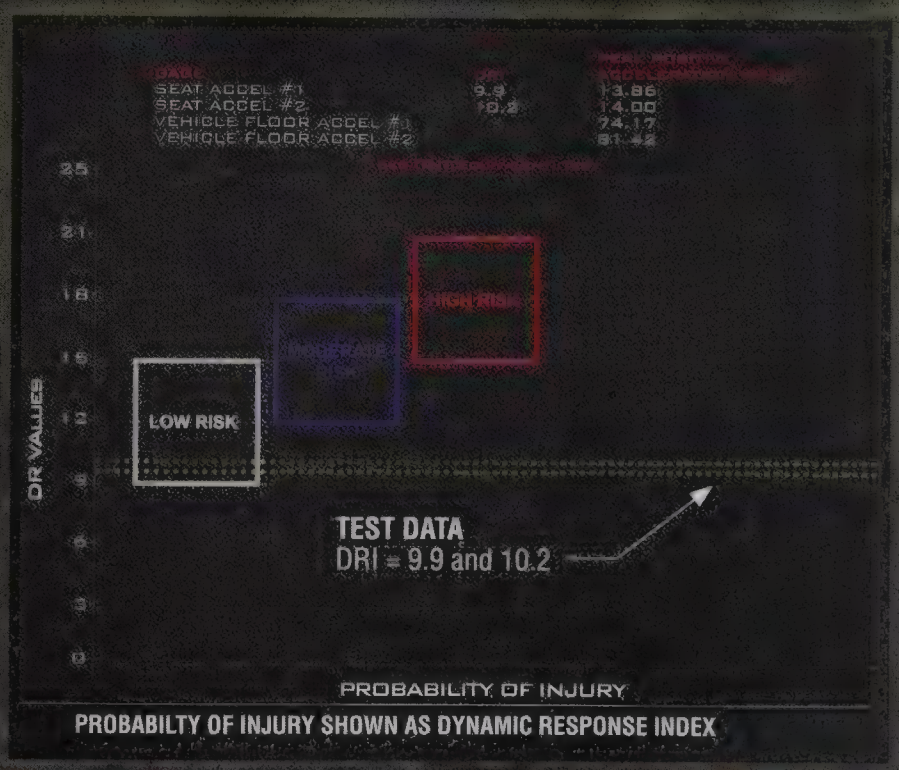
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- $81 million in savings from FY 2006 through FY 2008 at Anniston Army Depot, Ala.
- $26 million in annual savings at Corpus Christi Army Depot, Texas.
- $1.7 million in annual savings at Tobyhanna Army Depot, Pa.
- In terms of annual benefits, the Lean Six Sigma initiative has yielded a steady stream of year-to-year savings: $110 million in FY 2005, a jump to $247 million in FY 2006, more progress in FY 2007 with a total of $305 million, and another increase in FY 2008 to $310 million.

Beyond the continental United States, the materiel enterprise and our cost culture are generating greater efficiencies in theater. Through the logistics civil augmentation program IV, the power of competition is being harnessed to deliver the best quality at the right price for our men and women around the world.

The mine resistant ambush protected (MRAP) vehicle, one of the most successful rapid fieldings of equipment in DoD history, has saved many lives on the battlefield. The armored-vehicle initiative is hailed as an acquisition success. Now we must ensure the same success with materiel sustainment, refurbishment, repair and the maintaining of readiness rates in Iraq.

Our goal, with the materiel enterprise initiative, is to create an environment of collaboration. That environment establishes a fully developed enterprise approach when presented with challenges posed by MRAP sustainment. Through the materiel enterprise, we gain an understanding of the total life-cycle management requirements and costs. The results are enhanced speed of delivery, higher performance levels and the best value.

Institutional Adaptation and Transformation. The materiel enterprise is yielding improved support to deployed units for an Army at war. Through best practices, the Army is learning and transforming. As a consequence, we are faster, more agile and offer comprehensive equipment solutions to soldiers in the field. We are saving lives and improving support to units and soldiers in the ARFORGEN process. The rapid fielding of MRAP vehicles offers an excellent example.

We often think, act and make decisions within our own organizational boundaries, staying safely and comfortably inside our "stovepipes." A vital, evolutionary enterprise approach requires that organizational members—at every level—take a broader perspective. Achieving transformation requires sharing information across organizational boundaries in order to make informed decisions from an enterprise perspective. Collaboration and transparency are the principles that should guide all of our actions.

The Evolution of Enterprise Governance. Governance is essential to managing the materiel enterprise. Transformation depends on our ability to quickly respond to any and all future challenges. The materiel enterprise must rely on leaders' willingness to interact, share information and encourage continuous collaboration at all levels. Organizational governance is integral to our pivotal cultural shift. That shift must be accompanied by an equally important expansion of a responsive environment based on transparency.

Internally imposed discipline is provided by a structure of interwoven boards and oversight mechanisms. That necessary governance, which includes ASA(ALT) and AMC, begins with the establishment of a three-tiered structure based on review roles: an executive board to oversee the entire materiel enterprise, an operating board to ensure integration across the enterprise and an execution board to encourage functional and multifunctional coordination with program executive officers and program managers.

These boards include all stakeholders in ongoing and significant decision making. This structure also allows for recommending policy changes to the Army enterprise board in order to operate more effectively and efficiently within the enterprise—an essential flow of information that is necessary for transformation.

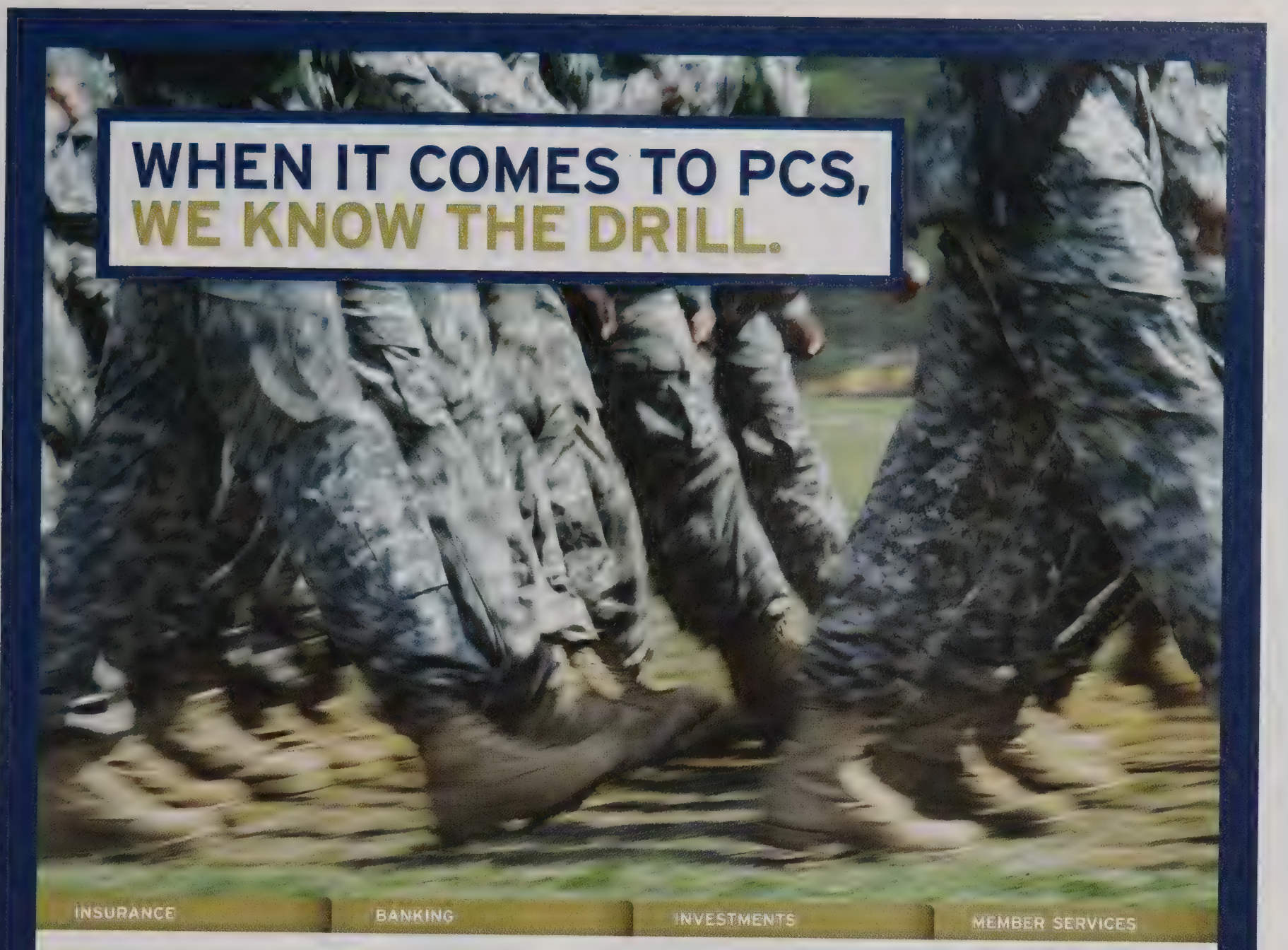
We will accelerate the transformation of AMC by adapting our life-cycle managers, creating the conditions for better decision making, recalibrating our strategic objectives, encouraging a shift to a cost culture and ensuring organizational governance.

This is a journey that will be undertaken in concert with the other Army core enterprises, the Army enterprise task force and the chief management office in the Office of the Secretary of the Army and Office of the Secretary of Defense. Let us not forget the fundamental reason for the institutional adaptation initiative: to help rebalance our Army and ensure we are good stewards of taxpayers' dollars while providing trained and ready forces to the combatant commander. ★



U.S. Army/Jim Hinnant

Heavy mobile equipment mechanic Carl Bess, a Department of the Army civilian employee, troubleshoots the driver's seat hydraulic assist mechanism for an M1117 Guardian armored security vehicle in 2008 at the 401st Army Field Support Brigade's ASV Repair Facility, Camp Arifjan, Kuwait.



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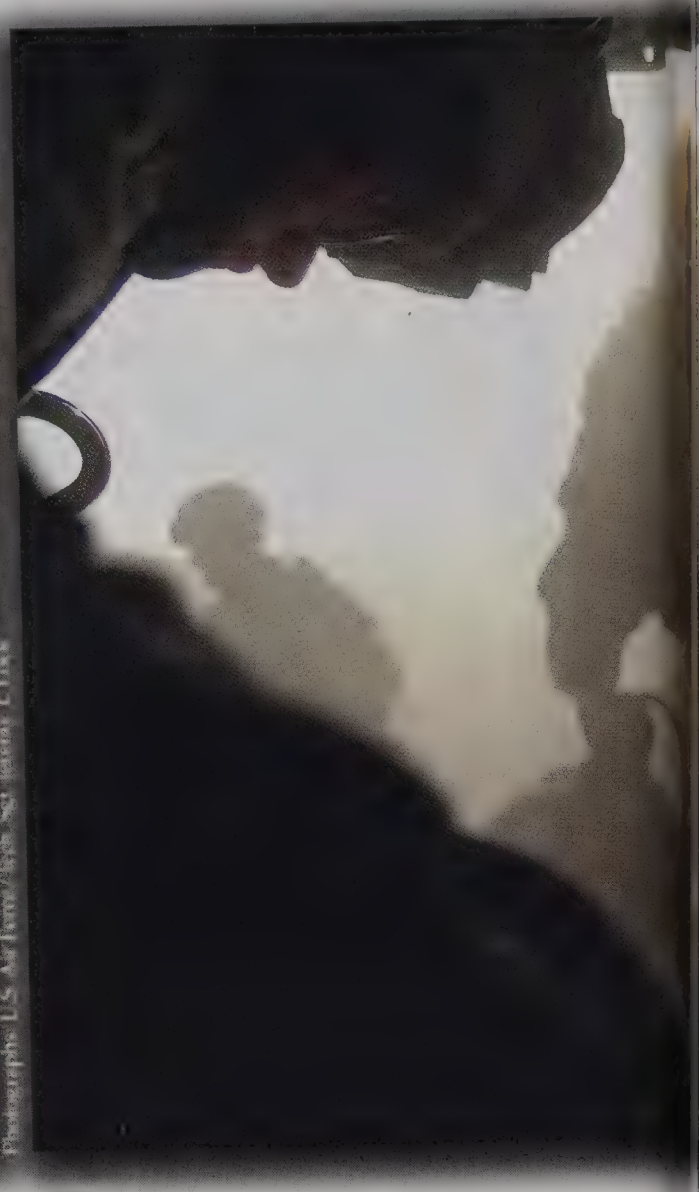
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Photographs: U.S. Army Photo/Pfc. Sebastian Llinas

A Light in Ramadi

Left, marines and soldiers from the 1st Armored Division, with Iraqi soldiers, track insurgents who attacked them in Ramadi, capital of Anbar Province, Iraq, in 2006. Center, Spc. Jeffery Moore, Company B, 2nd Battalion, 6th Infantry Regiment, 1st Armored Division, prepares to exit a Bradley fighting vehicle after a raid in Ramadi in 2006. Right, soldiers from Company B, 2nd Battalion, in a Bradley fighting vehicle participate in a raid in Ramadi in 2006.

From The Gamble *by Thomas E. Ricks. Reprinted by arrangement with The Penguin Press, a member of Penguin Group (USA), Inc. Copyright © Thomas E. Ricks, 2009.*

Near the end of Maj. Gen. William Caldwell's press conference on October 19, 2006, just a few minutes after the spokesman had announced the failure of the Baghdad security plan, one reporter had inquired about some odd reports coming out of Ramadi, 60 miles to the west of Baghdad. Specifically, inquired the man from Reuters news agency, why were armed civilians marching in the streets? What was going on out there? Caldwell responded that he hadn't heard about that and would look into it.

It was a good question because Ramadi had been one of Iraq's most dangerous cities for years. This time, to the astonishment of anyone focused on Baghdad, the armed men were not members of al Qaeda in Iraq but allies of the Americans, albeit tentative ones. Ramadi, the capital of turbulent al Anbar Province, had begun to provide a counterexample to Baghdad. That turnaround, led by Col. Sean MacFarland, would take place even as the senior Marine intelligence officer in the country pronounced the province lost. Ramadi in 2006 would become the link between the first successful large-scale U.S. counterinsurgency campaign in Iraq, in Tall Afar in 2005, and the "surge" counteroffensive in Baghdad in 2007.

By chance, MacFarland's unit first had been assigned to replace the 3rd Armored Cavalry Regiment in Tall Afar, in the far northwest of Iraq, and had spent several months there before moving south to Ramadi. What MacFarland and his subordinates had seen there was very different



from how the U.S. military had operated in Iraq for several years. The new approach made sense to him. Under Col. H.R. McMaster, an innovative officer unafraid to chart a different course, the 3rd Armored Cavalry Regiment had slowly and patiently approached Tall Afar, a medieval-feeling town of about 250,000. After the U.S. military reduced its presence in northern Iraq in 2004, Islamic extremists had begun to seep in from Syria and make contact with local allies. By mid-2005 they had intimidated the locals with terror tactics and made the town a base from which to send suicide bombers and other attackers 40 miles east to Mosul, the most important city in northern Iraq. "Give the enemy credit," said Maj. Chris Kennedy. "As soon as we started pulling back, the enemy identified that as a weak point."

By Thomas E. Ricks

McMaster, who is both a rugby player and a Ph.D. in history, began by telling his soldiers to treat Iraqis with dignity and respect. "Every time you treat an Iraqi disrespectfully, you are working for the enemy," he instructed them—neatly summarizing counterinsurgency theory in a way that any nineteen-year-old infantryman could grasp. In a marked contrast to the attitude found in some other units, his standing orders required his soldiers to "treat detainees professionally; do not tolerate abusive behavior." He met with sheikhs and clerics who had ties to the insurgency and apologized for past American mistakes: "When the Americans first came to Iraq, we were in a dark room, stumbling around, breaking china. But now Iraqi leaders are turning on the lights." And, he added, the time for honorable resistance had ended.

Then, after months of preparatory moves in the desert around the city, cutting off lines of retreat and safe havens, McMaster attacked Tall Afar. Rather than just stage patrols from his big base outside the city, he moved his people into it, establishing 29 outposts in its neighborhoods. In sum, it was a model of a counterinsurgency campaign, the first large-scale one conducted in the war. It was an example the U.S. military needed badly. In far northwest Iraq, a Marine battalion commanded by Lt. Col. Dale Alford carried out a similar campaign, establishing outposts in the area of al Qaim and cutting deals with local sheikhs. However, these examples weren't imitated by other commanders, probably because they were at odds with the strategy set by Gen. George W. Casey Jr. and his boss at Central Command, Gen. John Abizaid. Working on the theory that the U.S. military presence was an irritant to Iraqi society, the generals were trying to oversee a transition to Iraqi forces and so wanted an ever-shrinking American "footprint." By contrast, McMaster injected thousands of U.S. troops into the middle of a city, implicitly saying that they were not the problem but part of the solution, that American troops weren't the sand irritating Iraqi society, but could be the glue that held it together.

McMaster's organization also began to grasp the significance of Iraqi tribal power. One of MacFarland's officers, Capt. Travis Patriquin, a bright, bushy-haired, Special Forces veteran who spoke Arabic, Spanish and Portuguese, was particularly intrigued by this. Lt. Col. Paul Yingling,



A soldier from the 1st Armored Division and a marine from the 1st Explosive Ordnance Disposal Company take cover after receiving small-arms fire from insurgents in Ramadi.

U.S. Air Force/Tech. Sgt. Jeremy T. Lock

his counterpart in the 3rd Armored Cavalry Regiment, told him about an officer's encounter with a sheikh of the Shammar tribe. "Sheikh, why do you smuggle sheep and benzine in from Syria?" the officer asked.

The sheikh had responded, "Why did you put the Syrian border in the middle of my sheep? We were here first."

Yingling told Patriquin about the Shammar tribe's view of the world. "He understood it very well and got a good laugh out of the story," he recalled.

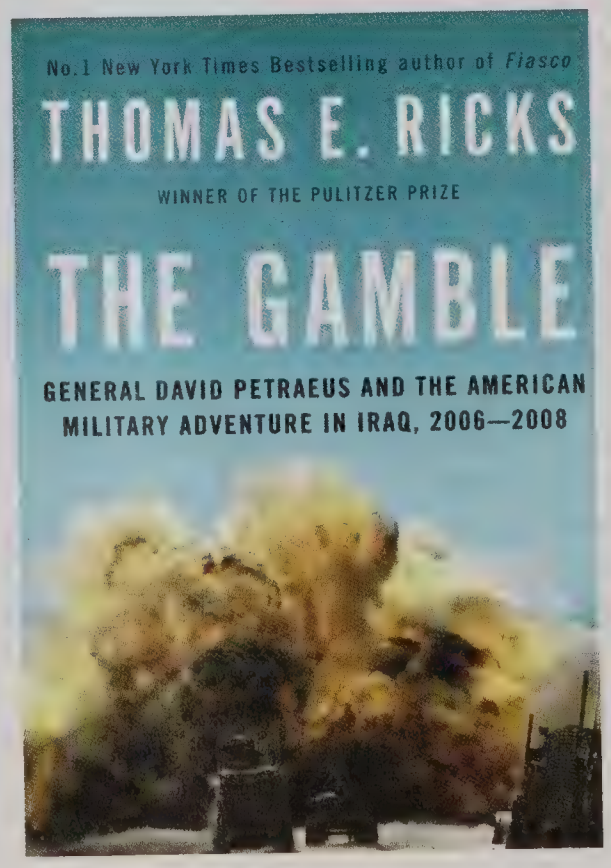
A few months later MacFarland was ordered to move his unit, the 1st Brigade of the Army's 1st Armored Division, to Ramadi. A soft-spoken officer from an Irish Catholic neighborhood in Albany, New York, MacFarland knew that every brigade assigned to that violent provincial capital had lost about 100 soldiers during its tour of duty, even as the city steadily declined into chaos.

"I'll be goddamned if I lose one hundred soldiers here and have nothing to show for it," the brown-haired cavalryman, a 1981 graduate of West Point, vowed to himself.

His orders were to "fix Ramadi, but don't do a Fallujah"—a reference to the intense battles for that city just to the southeast in 2004. "But I really wasn't sure how I was going to 'fix Ramadi.'"

THOMAS E. RICKS is the author of Fiasco: The American Military Adventure in Iraq, 2003–2005 *and* The Gamble: General David Petraeus and the American Military Adventure in Iraq, 2006–2008, *from which this is excerpted. He covered the U.S. military for more than 15 years, first for the* Wall Street Journal *and then for the* Washington Post. *He reported on U.S. military activities in Somalia, Haiti, Korea, Bosnia, Kosovo, Macedonia, Kuwait, Turkey, Afghanistan and Iraq. He is now a senior fellow at the Center for a New American Security and a contributing editor of* Foreign Policy *magazine, for which he writes the blog "The Best Defense." He also has written on defense matters for the* Atlantic Monthly *and other publications.*

All the conventional responses had been tried and none had worked, so three years into the war, MacFarland was willing to take a gamble on something different. Anbar Province had at first been all but ignored in the planning for the 2003 invasion, then treated as an "economy of force" operation and then saw two bruising battles for control of Fallujah in 2004. In a low point just before MacFarland's brigade arrived, a protest broke out at a graduation ceremony for 978 Iraqi soldiers, most of them Sunnis, at nearby Camp Habbaniyah. Provoked by word that they would be ordered to deploy outside their home province of al Anbar, some soldiers began tearing off their uniforms before the astonished eyes of the Iraqi and American officials in attendance for the event, which they had hailed in speeches as a major step in the formation of the Iraqi army.



At the time, U.S. military spokesmen attempted to minimize the significance of the event. "It was actually a very small number of graduates," claimed one. …

But Carter Malkasian, a counterinsurgency adviser to the Marine Corps in Anbar, later disclosed that a full two-thirds of the soldiers refused to deploy, and more than that ultimately deserted.

On top of that, the Iraqi battalion that MacFarland was counting on for help had mutinied upon being informed that it would be deployed to Ramadi. Of several hundred men in the Iraqi unit, only about 140 showed up, he recalled—and most of them re-

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fused to leave the base to go on patrol. "We basically just sent them home," he said.

MacFarland's audaciously different approach to Ramadi ultimately would become an out-of-town tryout for the surge that came eight months later in Baghdad, not so much in troop numbers, but—far more important—in the strategy of moving into the population and the tactics of how to do that successfully.

The two major differences are that Ramadi is overwhelmingly Sunni—and so didn't have sectarian fighting—and also is a fraction of the size of the capital.

In 2005 al Qaeda in Iraq had mounted a ferocious campaign against about 12 tribal leaders who competed with the terrorist group for the loyalty of al Anbar's population by forming the Anbar People's Council. "This was the first broadly based opposition to al Qaeda," recalled Marine Brig. Gen. John Allen. "Al Qaeda recognized the threat and attacked almost immediately," conducting a focused and efficient assassination campaign. In one month, half the sheikhs in the council were dead, with the remainder fleeing the country. The Americans really hadn't come to the aid of the sheikhs, who had multiple ties to the Sunni insurgency.

"There was a large safe haven there … Al Qaeda was calling the shots," MacFarland said. "Zarqawi was known to go out there, for instance. I mean, this was where al Qaeda went when they got pushed out of Fallujah." In retrospect, he estimated that he faced perhaps 5,000 fighters in the city.

When MacFarland's unit arrived in Ramadi, it was hit by bombs, grenades, mortars and rifle fire an average of 25 times a day. It was replacing a unit from the Pennsylvania National Guard that had retreated from parts of the city. "My predecessor was just trading artillery fire with the rocket and mortar fire," he remembered. "Al Qaeda had the run of the town … The enemy basically controlled the center part of the city." Every night, insurgents were planting an average of eight roadside bombs in and around the town. The National Guardsmen had stopped patrolling in areas where they had been hit hard, he said, leaving parts of the city map that, he joked, were labeled "Here be monsters."

The city wasn't even on life support. "There was no mayor, there was no city council, and there were no communications like we had in Tall Afar," he said. "Basically, all services had stopped."

Sheikhs were telling reporters that they no longer felt safe being around Americans. "Today, there is no tribal sheikh or a citizen who dares to go to the city hall or the U.S. base because Zarqawi issued a statement ordering his men to kill anyone seen leaving the base or city hall," said the head of one tribe, Bashir Abdul Qadir al-Kubaisat. The U.S. military assessed that of the 21 tribes in the area, only six would cooperate with it.

Desperation may be one of the stepmothers of invention. "There was really no place to go but up," MacFarland recalled. "I was willing to try whatever made sense."

Other units were moving away from the cities, concentrating their forces on big bases. He decided to go in the opposite direction. His commanders, who were Marines, were skeptical, having seen dialogues with tribal leaders start up and then peter out before, but they let him take a flyer. "I had the backing of my bosses, but not a lot of guidance. I felt like if it failed, it would be my failure."

Sterling Jensen, who was working as an interpreter for MacFarland's brigade and had become deeply involved in tribal issues, recalled the Marines being even more negative. "They'd say, 'You guys don't know what you're doing. You're way too arrogant. You're going to get yourselves killed.'" The Marines had tried several times to reach out to tribes, only to see al Qaeda assassinate sheikhs who turned.

Senior Marines also thought that MacFarland was dealing with third-rate sheikhs who didn't hold real power. What MacFarland wasn't seeing was that some Marine generals had noticed that there was a quiet—almost secret—war under way in Anbar between some tribes and al Qaeda. The Marines were reaching out to some of the harder-hit sheikhs, offering them help.

On the upside, MacFarland's superiors were willing to give him what he needed—a Marine infantry battalion, snipers from two Navy SEAL platoons (dubbed Task Force Bruiser), and even four 40-foot-long armored Marine riverine boats to cut off the enemy crossing points on the Eu-



U.S. Army/SFC David D. Isakson

Following a terrorist attack on Ramadi's Government Center, soldiers from Company B, 1st Battalion, 109th Infantry Division, patrol a nearby village.

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USMC / Cpl. Richard A. Hilario

U.S. Marine Corps Lance Cpl. Austin Lawler, Dam Security Unit 3, provides security from a watercraft in the Euphrates River during a patrol around Ramadi in 2006.

phrates River and stealthily insert patrols. "They were fast, they were quiet, they were heavily armed, and they could carry a squad and put them ashore," he said. "They could kind of run up on the beach, dump them off, back off and then provide fire support."

Interestingly, among the Marines deployed to Ramadi was Cpl. Jimmy Webb, son of James Webb, the novelist (*Fields of Fire*) and former Navy secretary who in 2006 was running a long-shot campaign to become a U.S. senator from Virginia. While home on leave, the corporal asked his father why his opponent, Senator George Allen, made cowboy boots the symbol of his campaign "when Virginia doesn't have any cowboys." Webb was intrigued. His son also pointed out that he and his father both had worn combat boots in wartime. He gave his father his own boots, which he had worn in the streets of Ramadi. Webb would wear them throughout his campaign.

MacFarland and his staff began by thinking about the "metrics" they should use. If the goal was to protect the population, as they had seen in Tall Afar, then that is what should be tracked somehow. They also knew they would have to confront the skepticism of local leaders, who had seen Americans come and go for more than three years, making promises that often weren't met or were forgotten by successor units. MacFarland began to spread the word that the Americans weren't leaving anytime soon.

Knowing that Americans had put in office a generation of leaders and then seemed unable to keep alive those police chiefs, mayors and governors, MacFarland made protection of local leaders a top priority. He stationed tanks at key intersections near their houses and put drone aircraft circling over their homes to keep an eye out for attacks. He also asked sheikhs for advice on where to place new police stations and outposts, calculating that they would put them near their homes.

He named the Arabic-speaking Capt. Patriquin as his liaison to the sheikhs. Together they tried to sort out who was a real sheikh, with big *wasta*, or influence, and who was a lightweight. They also realized that years of fighting had created an opening: Not only had some sheikhs been killed, many others had moved to Jordan—and so a new generation of tribal leaders was emerging. "It was like going into Don Corleone's house—you can tell who has *wasta*," especially by following who moderated the discussion, he observed. The first sheikh with whom he began to work closely was Abu Ali Jassim, whose tribe was based out in the desert.

Following the example of the 3rd Armored Cavalry Regiment in Tall Afar, MacFarland began to establish small bases in the city. In the past, U.S. units had operated from a large FOB, or forward operating base, outside it. "They exited the FOB, drove to an objective or patrolled, were attacked, exchanged fire and returned to base," he wrote later.

The first step under the new approach was to send Special Operations sniper teams to sneak into the building he wanted to occupy. Then he would have a "route clearance" team work its way through the roadside bombs to the building, followed immediately by a company of Army troops or Marines to occupy the building. Upon arrival they would begin building a new combat outpost. The snipers would move out to the surrounding area to disrupt counterattacks.

Overnight, the outpost would appear, with living spaces and walls and barriers to limit the damage from car bombs. They even figured out how to use a crane to immediately deposit a steel "crow's nest" on top of a building, so they could begin with a well-protected observation post without having to divert troops into filling and carrying sandbags to the roof. (Learning that filling sandbags between patrols was wearing out the troops in the outposts, MacFarland instituted a new policy on his base. Everyone had to fill two sandbags before every meal. "No work, no food," he said. "We could generate 10,000 to 12,000 sandbags a day on Camp Ramadi and push them out to the combat outposts.") Quick steps to establish combat readiness in the outposts were necessary because new outposts were almost always assaulted within two or three days.

Four benefits, much of them unexpected, flowed from the redisposition of troops into the small new bases, which eventually would total 18. In the most successful ones, Americans and Iraqi soldiers lived and ate side by side.

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USMC / Cpl. Richard A. Hilario

Iraqi troops and U.S. soldiers from the 28th Infantry Division search for weapons caches and insurgents north of Ramadi.

This meant Iraqis and Americans could learn from each other—about Iraqi culture, about weapons maintenance, about leadership. Also, Iraqi soldiers living on American rations began to show more energy. "You'd be surprised at how much work you can get out of an Iraqi if he has had enough calories to eat," MacFarland said. Another immediate benefit of this redeployment, he found, was that his soldiers became less predictable. No longer could Iraqi fighters simply watch the front gates of an American base to know when a patrol was coming. "Because we now maintained a constant presence in disputed neighborhoods, the insurgents could no longer accurately trace and predict our actions."

Most important was the political effect of the new outposts. MacFarland laid down a rule that once one was established, they wouldn't let themselves be driven from it. "You never give it up," he said. "More than anything else, that was what persuaded the sheikhs we were there to stay." In the past, he said, American commanders had said, "Don't worry, we're leaving." He decided to say the opposite: "We're staying until we win this fight." It helped that once he had an outlying base, he would begin spending reconstruction funds in the surrounding neighborhood.

All told, he estimated, he would dispense more than $2 million in 2006 and early 2007.

He sought to keep up the pressure so that the enemy, once knocked off balance, couldn't regain the initiative. "What can I do to make life miserable for al Qaeda today?" he would ask himself. "We tried to have an operation every few days. Can I put up another combat outpost? Should I start an adult literacy class? Can I throw in the kitchen sink?" Figuring that the local al Qaeda fighters might move to the outskirts, he set up Iraqi police stations in the rural tribal areas. Police were always recruited locally, which gave them extra incentive to stand up to the terrorists, he noted. "The IPs [Iraqi police] refused to be intimidated because they were defending their own homes," he said.

By the end of July 2006, he was beginning to sense that the new approach was working, even though it brought new risks. The commander of the Marine battalion attached to MacFarland's Army brigade told him that west Ramadi was quieting down. Top Marine commanders began to be convinced that what was happening in Ramadi was different from previous sheikh-led pushes against al Qaeda.

Even so, there were days when MacFarland had his doubts, especially as the enemy launched a counteroffensive. At the end of the first week of August, he thought to himself, "My God, I've lost 10 guys." Two weeks later, on August 21, Sheikh Jassim, his first ally in the tribes, was assassinated. "I couldn't have protected him if I wanted to," MacFarland said. The sheikh's killers hid his body for four days, a pointed violation of the Muslim custom of quick burial. On the same day, a new Iraqi police station in the Jazeera neighborhood, manned mainly by members of Sheikh Jassim's tribe, was bombed. All told, MacFarland lost two dozen vehicles—a few tanks, but mainly trucks—as he moved into the city.

But, he said, the local reaction to the August attacks indicated that al Qaeda might have overplayed its hand: They drove some fence-sitters into the American camp. One sheikh, Sittar albu-Risha, was particularly angry. "Sittar has lost enough family members that he was ready to throw away caution." This sheikh, a minor tribal leader who had a reputation for running a thriving cross-border smuggling business, called a meeting for September 9. More than 50 sheikhs and other notables showed up. They created what they proposed calling The Awakening Council. They had a platform with 11 planks. "Ten of them I would have written for them almost exactly the same way they wrote them," MacFarland recalled. The last one was problematic in that it implied they might have to kill the governor of al Anbar Province. He suggested they modify it.

As MacFarland parleyed with sheikhs, the energetic Capt. Patriquin worked the other people in the room. "He was very extroverted and friendly and was very popular among the tribes because he was the officer who identified little things we could do for them, like attention for a sick

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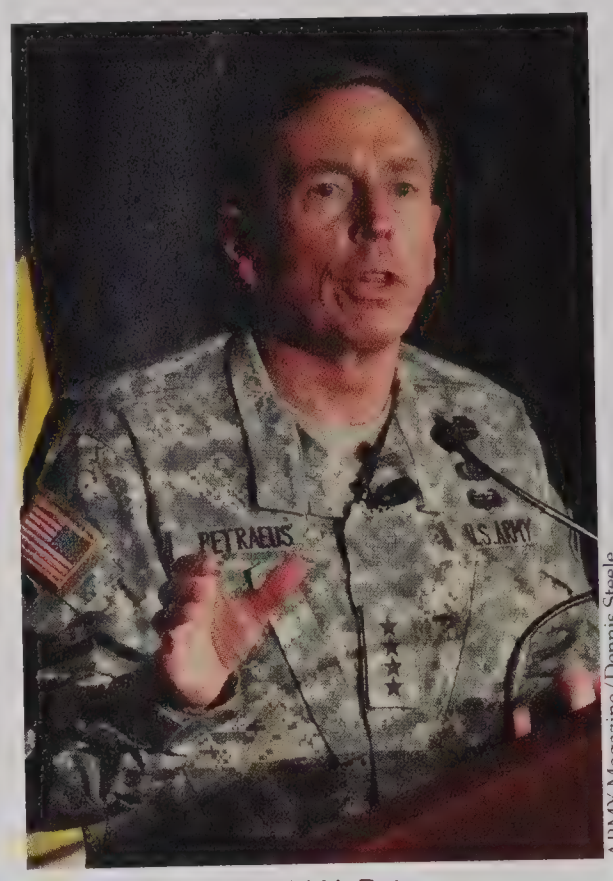
William Stenhouse
DDKS Project Manager
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child." Sheikh Sittar eventually gave the captain the honorary tribal name Neshan Abu Risha, which some Iraqis say means "a warrior of the Albu Risha," the sheikh's tribe.

That day was a turning point for MacFarland—and, as it would develop, for al Anbar Province and Iraq. "To me, it was the first real clear vindication of the strategy we were pursuing, that we were beginning to turn the tide." The meeting encouraged more sheikhs to come in and work with the Americans, and with them came a "snowball effect" on recruiting of local police and other tasks, MacFarland said. "Whenever a tribe flipped and joined the Awakening, all the attacks on Coalition forces in that area would stop, and all the caches of ammunition would come up out of the ground. If there was ever an attack on us, the sheikh would basically take responsibility for it and find whoever was responsible, and this happened time and again. So it was incredibly effective, and they were as good as their word."



ARMY Magazine/Dennis Steele

Gen. David H. Petraeus

MacFarland had come to terms with the fact that some of those newly forthcoming sheikhs had participated in attacks on Americans. "I'm a product of Catholic schools," he said, "and I was taught that every saint has a past and every sinner can have a future." Sittar reported that he had several thousand volunteers who didn't qualify for the police because they were illiterate, underage or overweight, so he was allowed to create three "emergency battalions" to employ them.

MacFarland armed them with captured weapons and had his SEAL teams give them a one-week training course. The prevailing American theory for years had been that improvements in security would lead to progress in politics. This was the opposite—political change leading to improvements in security.

That decision also took the United States into the dangerous and complex new territory of supporting an armed group that was opposed to the government in Baghdad that the United States also supported. As Carter Malkasian, the counterinsurgency adviser to the Marine Corps in al Anbar, put it, "For all intents and purposes, the government was permitting Sittar and his movement to have their own militia." But, as Generals David H. Petraeus and Raymond T. Odierno would do the following year, MacFarland had decided it was time to take some risks, especially given that the alternative appeared to be failure.

The Shiite-dominated Iraqi government, in the midst of a small civil war in Baghdad between Shiites and Sunnis, wasn't happy with what it was hearing out of Ramadi about the Americans cutting local cease-fire deals with Sunni sheikhs.

Here again, MacFarland found that American experience on the ground in Iraq helped. His deputy commander, Lt. Col. James Lechner, had spent time as an adviser to the Iraqi military and "knew how to work the system to get guys paid." Among other things, MacFarland noted, "That built up my *wasta* with the sheikhs."

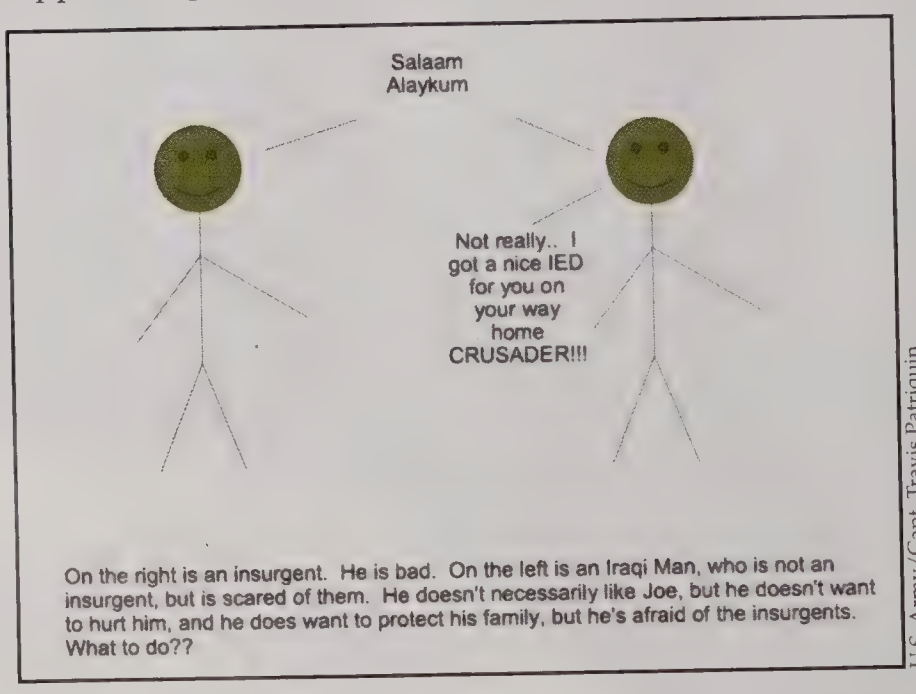
Faced with skepticism from his superiors and from journalists who were being told by Iraqi officials in Baghdad that he was arming Iraqis to fight the Iraqi army and police, MacFarland had Patriquin create a briefing to explain what he was trying to do. Far from the usual razzle-dazzle of U.S. military PowerPoints, the briefing was written breezily, almost in the style of a children's book, with stick figures. It was titled "How to Win the War in Al Anbar, By CPT Trav."

Capt. Travis Patriquin's briefing was both perhaps the most informal one given by the U.S. military in Iraq—and the most important one. "This is an American Soldier," it began. "We'll call him Joe. Joe wants to win in Al Anbar. But sometimes it seems like other people don't share that idea." This made Joe sad.

Then the briefing posed the key question: "How can Joe win in Al Anbar? By fighting the insurgents?" The briefing didn't say so, but the answer the U.S. military had given for three years had been: Well, of course, yes.

A subsequent slide identified the problem with that approach: "Poor Joe can't tell the terrorist from the

In an informal briefing, Capt. Travis Patriquin created a set of simple visuals to explain his mission and gain support of Anbar's sheikhs.



U.S. Army/Capt. Travis Patriquin

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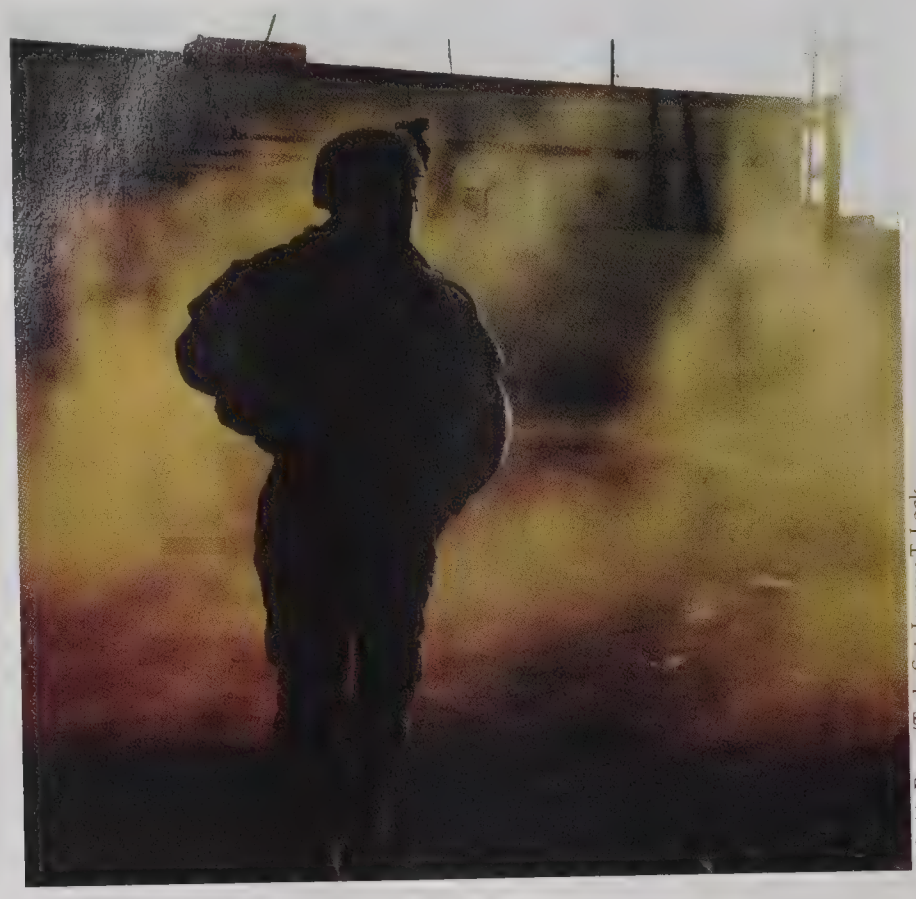


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U.S. Air Force/Tech. Sgt. Jeremy T. Lock

A 1st Armored Division soldier advances to his next objective during a morning raid in Ramadi in 2006.

good Iraqis." The smiling stick figures look all the same to him. The solution, the brief said, was to talk to the sheikhs about making local militiamen members of the police force. "The Iraqi Policeman can tell the difference. And the insurgent knows that. See, that's why he's sad." This makes everyone else happy. "The sheikh brings more sheikhs, more sheikhs bring more men. Joe realizes that if he'd done this three years ago, maybe his wife would be happier."

The theory was working, but the fighting continued. On September 29, Michael Monsoor of Garden Grove, California, a twenty-five-year-old member of a Navy SEAL team, threw himself on a hand grenade while his team was being attacked, an act of valor for which he was posthumously recognized with the Medal of Honor. He already had received a Silver Star for rescuing a wounded comrade under fire four months earlier.

On November 25, about three dozen al Qaeda men with weapons drove into Sufia, home of the Albu Soda tribe, just east of Ramadi. The small tribe, which had only about 30 men of military age in that area, had rebuffed MacFarland's recruiting efforts, he said, because it wanted to be neutral. But as part of that effort, it had established checkpoints to keep out al Qaeda, which antagonized the terrorist group because the tribe lived along the main corridor from Fallujah to Ramadi. After the gunmen opened fire, some tribal members escaped in boats across the Euphrates and ran to an Iraqi army base. Soldiers there called an Iraqi interpreter for an American officer, who called MacFarland's headquarters. Capt. Patriquin and Sterling Jensen, the interpreter, began gathering information.

"We're being wiped out," the tribe's beleaguered sheikh told Jensen. "People are killing us." The sheikh's sister had been killed, and al Qaeda men were dragging the body by ropes behind a pickup truck. MacFarland postponed another operation and sent the units involved in that to the aid of the tribe, even though it had held him at arm's length. A drone reconnaissance aircraft was sent to circle over the fight.

Patriquin called the sheikh of the tribe. "Hey, look," he said. "We can't tell who is who. Could you have your guys wave towels over their heads so we can identify friend from foe?" That done, Marine F-18 warplanes rolled in to bomb those without towels, and then arriving U.S. Army tanks began to fire on fleeing al Qaeda automobiles.

After the fight, MacFarland went to talk to Albu Soda's bloodied, combat-shocked leaders. "They were kind of battle-fatigued, had lost a lot of family members. At the same time, it was like a switch had been flipped. Guys who had been reluctant to talk to us were saying, 'Would you please build a combat outpost near our home?' and telling us where al Qaeda was in their area."

That day was the tipping point, he said. After that, he was flooded with tips and recruits. "After that tribe flipped, the kids were running around, it was like liberated France, it was like Rumsfeld imagined it would be in 2003." Also, a major insurgent route into the city had been cut.

One of MacFarland's enlisted men studied street life and concluded that people in Ramadi didn't read newspapers or even listen to the radio much, but that they did pay attention to the messages from loudspeakers on the minarets of mosques. So, beginning at one platoon-sized base, Combat Outpost Firecracker, MacFarland's soldiers put up loudspeakers to broadcast, every day but Friday, the Muslim sabbath, sports news and weather reports—and occasionally slip in information about al Qaeda attacks. "The news was pulled from places like Al Jazeera and Al Iraqia and news sources that people would know were not ours," he said. Some of it was just helpful tips: "The UN warehouse has a new shipment of rice." Occasionally another message would slip in: "Last night al Qaeda killed a family of five in their home."

But even as late as December 6, 2006, MacFarland would be thrown for a loss. On that day, Spec. Nicholas Gibbs, a twenty-five-year-old from Stokesdale, North Carolina, was killed by small-arms fire. "Part of me died along with him," his mother told a reporter. "I will never be the same."

The same day, Sgt. Yevgeniy Ryndych, a 1998 émigré from Ukraine to Brooklyn, was killed by a roadside bomb. His fiancée received her engagement ring in the mail from him the same day. "He was one of those people who not a lot of people liked because he sat home the whole day and read books," said his brother Ivan. "He was like a genius


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kid." And Marine Cpl. Dustin Libby, from Presque Isle, Maine, was manning a machine gun on a roof in Ramadi when he was shot.

Three other soldiers died that day when their Humvee was hit by a bomb. The first, Spec. Vincent Pomante, was from Westerville, Ohio. The second, Marine Maj. Megan McClung, became the highest-ranking female to die in combat in Iraq. A triathelete, McClung had organized a marathon for troops in Iraq. A journalist in North Carolina remembered that when a police officer pulled over McClung, she proved she was sober by doing a backflip on the side of the road. A graduate of the Naval Academy, McClung had left the Marine Corps but went back on active duty in order to serve in Iraq. Her name would become the first woman's to be added to the marble tablet at the academy that memorializes graduates killed in action. "Please don't portray this as a tragedy," her mother requested of a reporter. "It is for us, but Megan died doing what she believed in."

The sixth loss that day perhaps hit MacFarland hardest: Capt. Patriquin, the soldier who had reached out to the tribes, had been sitting next to McClung.

The next morning MacFarland found his staff and commanders downcast. "Everybody was kind of looking at their feet." He told them about how Gen. Ulysses S. Grant handled that first terrible day at Shiloh in April 1862. The Confederates had pushed the Union troops back to the Tennessee River, where thousands huddled terrified below the bank. Thousands more lay dead and wounded on the battlefield above them. That night Grant met with his commanders next to a log house being used as a hospital, reviewing the day's losses as men under the surgeon's knife screamed and died nearby—probably not the best place to locate a command post. At midnight, Grant went out to smoke a cigar, taking refuge from the driving rain under a tree. There, MacFarland told his soldiers, Gen. William T. Sherman found him. "Well, Grant, we've had the devil's own day, haven't we?" Sherman said to his dripping friend.

MacFarland reminded them of Grant's laconic response: "Yes. Lick 'em tomorrow, though."

The stoic, taciturn Grant was an inspiration to MacFarland throughout the year. "I felt I was fighting my way through the Wilderness Campaign," he said, referring to Grant's running battle through rough ground in northern Virginia against Robert E. Lee in May 1864. "I was taking a lot of casualties." MacFarland was hardly alone. In recent years, as the Army has come to grips with Iraq, Grant seems to be enjoying a resurgence in popularity with today's officers, probably because he is its patron saint of the long, hard slog.

By the onset of winter it was becoming clear that something fundamental had changed in Ramadi. "In the latter half of December, it was like the fever broke," MacFarland said. "Up until then, when we threw a punch, they threw a punch." The death rate for U.S. forces began to decline after that incident. By the end of that month, 12 of the tribes in the area were deemed cooperative and six neutral, leaving just three classified as uncooperative.

By mid-2007, it wasn't uncommon for a month to go by with no U.S. losses. Al Qaeda, meanwhile, was reeling. As David Kilcullen, Petraeus's counterinsurgency adviser, later put it, "In Anbar, we've got the tribal vengeance structure working in our favor." That is, where Americans once had been the target of Iraqis seeking revenge, now they were helping direct that impulse against al Qaeda and its allies in the insurgency.

Not only were the roadside bombs less numerous, they were becoming less sophisticated. "They went away from the remote-controlled IEDs to subsurface command wires to just hastily throwing out IEDs with pressure plates because that was all they could do," MacFarland said. "Because we were keeping such pressure on them, they just weren't able to get the big IEDs and get them all set up. So we knew we had them on the run when we started to see those kinds of things evolve and their attacks became smaller and smaller and less and less effective."

The attacks would continue, though. All told, MacFarland lost 83 soldiers in Iraq—but he had something to show for it. In February 2007, Gen. Petraeus, newly arrived in Iraq, would come to see him and ask some questions about his methods and metrics. "Sean had obviously done something extraordinarily important," Petraeus said later. "What you had there was the first really significant example of the concept of reconcilables and irreconcilables." Petraeus already knew that he wanted his troops to go out and protect the population. In Ramadi, he learned that "a key way of implementing that is not just living with them, it is also … literally separating them, protecting the population from the irreconcilables. That means you have to know who the reconcilables are and who the bad guys are, and then, of course, try to achieve some separation and protect the one from the other."

Gen. Peter W. Chiarelli, the number-two U.S. commander in Iraq in 2006, said that MacFarland's operation marked the first time in the Iraq war that a counterinsurgency campaign had been conducted and then had been sustained by the succeeding unit. "Sean was the first guy who did it, and it stuck for the guy who followed," he said.

Upon arriving in Iraq in December 2006, Odierno would seek to build on what MacFarland had started. "He's the guy who put this together"—that is, how to operate differently and more effectively in Iraq, Odierno said later. "Once they cleared Ramadi, and they stayed in Ramadi with a significant amount of force, that was the tipping point. The whole province seemed to turn over."

But Baghdad would be more complicated. Not only was it at least 10 times larger, it also had both the Shiite militias that weren't active in Ramadi, which was homogeneously Sunni. Tribes were less significant in the cities and among Shiites. Securing Baghdad in 2007 would make MacFarland's experience in Ramadi in 2006 look relatively simple. ★

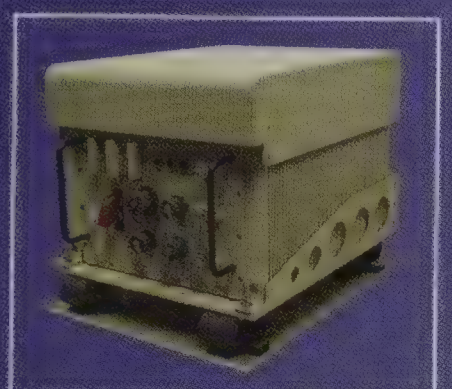
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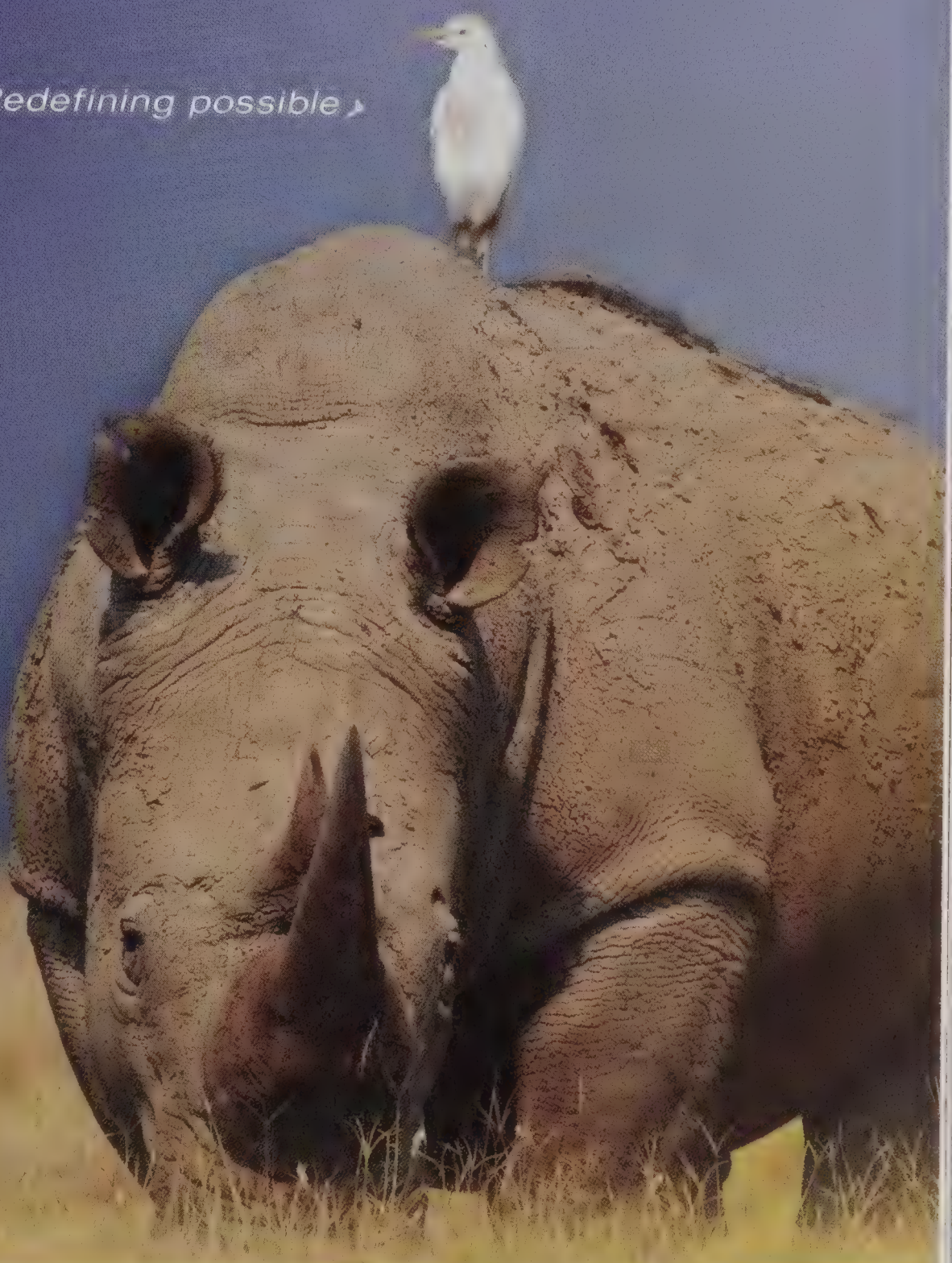
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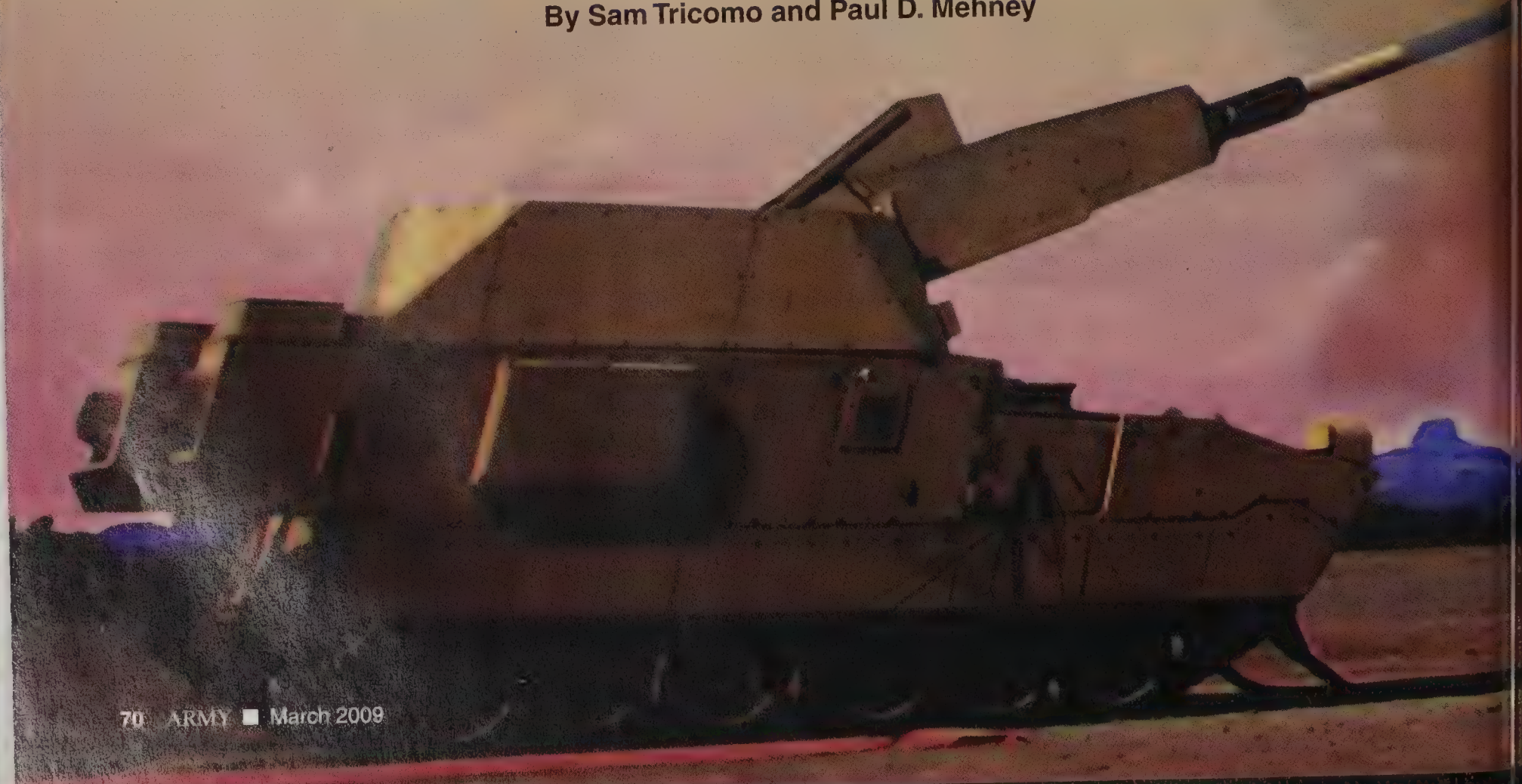
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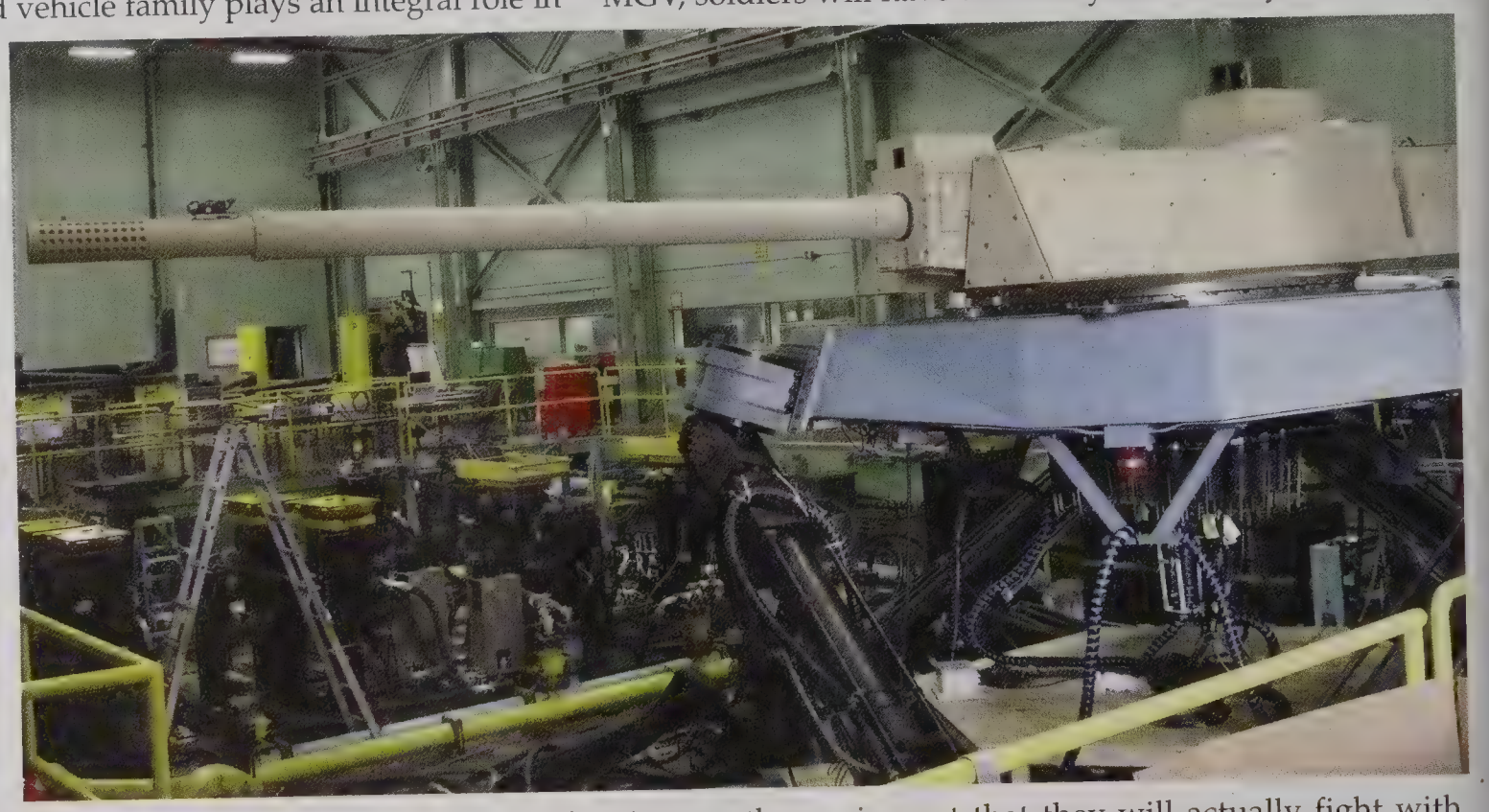
By Sam Tricomo and Paul D. Mehney



The blast from the non-line-of-sight cannon's (NLOS-C) 155 mm howitzer slams through the desert air. The massive barrel recoils, but the NLOS-C only pushes back slightly and then quickly rights itself. Inside the vehicle, the breach is cleared and a new round automatically loaded and fired. The few seconds it takes for the NLOS-C to unload its magazine, reload and fire speaks to a universal truth about security and protection: Those who are able to see and act first with the most precision win and live—those who aren't, perish. The NLOS-C and its seven companion manned ground vehicle (MGV) variants are central to the U.S. Army's commitment to modernization. That commitment is essential to the Future Combat Systems (FCS) philosophy of designing modern warfighter systems capable of protecting soldiers involved in full spectrum operations.

All photos courtesy of the U.S. Army

As proven on the battlefronts of Afghanistan and Iraq, those that would seek to attack or exert influence on U.S. interests exercise due diligence in planning to avoid the conventional battlefield, where U.S. dominance is unquestioned. Combatants use the cover of complex terrain or worse—concealment within noncombatant, civilian populations—as attack staging areas. Defeating enemies on today's complex battlefield requires easily deployable precision weapons fed by accurate, real-time information. The Future Combat Systems program is the cornerstone of the Army's strategy to achieve responsive, full spectrum, dominant modular forces that can rapidly deploy and sustain themselves during all operations. FCS represents the Army's first wholly networked force using eight variants of manned ground vehicles, unattended munitions, unmanned air vehicles, unmanned ground vehicles and ground sensor systems. The FCS manned ground vehicle family plays an integral role in protecting soldiers and giving them the information and tools they require in order to dominate and survive on the inevitable irregular battlefields of the 21st century.



The mounted combat system with turret is one of eight variants in the manned ground vehicle (MGV) family of the Future Combat Systems (FCS) program.

The Power of the Network

Acting as the central hub for sensor data input and communications, MGVs are the key to delivering the full future network down to the squad and platoon levels while on the move. To keep eyes and ears open over the entire battlespace, MGV crews will be networked to FCS unmanned air and ground vehicles and sensors, which provide information about the enemy's position in individual buildings and neighborhoods. This sensor information is uploaded in near-real time to the MGV crew's common operating picture. "Today's FBCB2 [Force XXI Battle Command, Brigade and Below] is only as good as the soldier who sees the information and populates the common operating picture," explained a company commander during recent test activities at Fort Bliss, Texas. "With FCS, we have sensors and unmanned air and ground vehicles constantly relaying information over the network to the common operating picture. This allows us to be miles away from these sensors but still have instant information from them."

The network also allows soldiers to arrive fully prepared for battlefield-specific missions. By updating training packages and mission rehearsal information through the network and embedding those onto the hard drive of the MGV, soldiers will have the ability to train anywhere, anytime on the equipment that they will actually fight with. FCS training products will come as training support packages (TSPs), complete packages of training materials needed to teach individuals, teams and units how to perform their individual and collective tasks associated with planning, preparing, executing and assessing operations.

These TSPs will be embedded in the computer systems onboard the FCS vehicles, and soldiers will access them through what is called the warfighter machine interface. The interface's primary function is to present relevant and timely battlefield information to the soldier, but it will also provide context-sensitive presentation management and simple, consistent role-based presentations, such as training scenarios. In addition, soldiers in their MGVs can rehearse the mission, receiving updates such as map and battlespace situational awareness while deploying to the mission location.

"In effect, everyone involved is reading from the same playbook at the same time," said Col. Bryan McVeigh, FCS product manager for MGV. "The vehicles are designed for the most likely current battlefield threat, not the kinds of

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SAM TRICOMO coordinates media activity for the FCS program office's communications team. He was an automotive journalist for several years. PAUL D. MEHNEY serves as the associate director for public communications in the Office of the Program Manager, Future Combat Systems. Previous assignments include serving as public communications officer at U.S. Army Tank Automotive Research Development and Engineering Center and in private industry as an assistant magazine editor.



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The MGV engine is a shared component in the MGV family. Commonality affords significant economies in development, maintenance, overall operation and life-cycle costs.

threats we faced during the Cold War when today's armored vehicles were developed. Previously, a soldier's situational awareness was based on spot reports sent via radio traffic. MGVs, enabled by a robust FCS network, give vehicle commanders real-time situational awareness and the ability to positively identify targets before striking and determine levels of success afterward. The network and FCS MGVs are inextricably linked and mutually dependent. You cannot have one without the other."

Commonality

Each of the eight MGV variants is designed around a common chassis, which houses a state-of-the-art hybrid propulsion and power distribution system. The variant's mission module is then integrated onto the chassis during final assembly. This commonality allows for significant economies in development, maintenance and overall operational and life-cycle costs. The benefits of developing one common chassis for several different vehicle purposes is obvious when viewing design, tooling and testing costs, but a common chassis also provides wide-ranging operational and logistics benefits.

In terms of deployability, the common chassis allows for fewer parts and tools to follow a brigade combat team (BCT) into action. It also greatly reduces the number of vehicle mechanics in each BCT. The common MGV family will enable every mechanic to work on every MGV chassis in the fleet.

Having a common chassis also allowed product managers and industry leaders to stretch the creative envelope. "Teamwork by the best of industry enabled the integration of the hybrid drive components," said Hugo Croft, vice president, FCS and advanced programs at BAE Systems. "The result is a hybrid electric drive system with improved fuel economy and a reduction in the Army's logistics footprint. The system's advanced energy storage, electric traction drive, power generation, regenerative braking and integrated power management technology all serve to provide our warfighters with increased performance and unprecedented flexibility."

The hybrid propulsion drive and power systems of the common chassis also allow for savings in fuel costs, both operationally and on the logistics side for storage and delivery. Tests to determine petroleum and oil sustainment rates of an MGV-equipped brigade combat team show fuel savings of roughly one-third compared with current heavy brigades. In addition, the MGV design allows for future improvements by decoupling the power generation unit from the drive-train architecture. Once this technology has matured, the existing power generation unit can be replaced by a fuel cell to further improve fuel consumption, acoustic signature and mobility performance.

Survivability: Protection that Soldiers Deserve

Soldiers who engage in full spectrum operations will encounter wide-ranging threats, including improvised explosive devices (IEDs), rocket-propelled grenades, antitank guided missiles, small- and medium-caliber threats, and more. The MGV platforms will provide superior protection against these kinds of threats. According to Col. McVeigh, "This is not another 70-ton Abrams vehicle. We cannot count on the thickness of our armor to protect troops as we have in the past. As is the norm, we are developing systems that will destroy targets beyond line of sight, while also offering a holistic survivability approach to protect our vehicle crews if they are in close engagements. Our mission is to balance 'lighter and faster' with improved survivability."

More than 75 percent of the FCS sensors are on the MGVs, giving soldiers advanced situational awareness from air, ground and joint intelligence surveillance and reconnaissance links. MGVs have a ring of survivability that includes signature management, countermeasures that will interfere with incoming threats, a long- and short-range active protection system, advanced composite armor, underbelly mine protection kits and advanced crew compartment protection.

Advances in composite and ceramic armor that can be bolted onto the MGV in anticipation of or as a reaction to specific threats make the MGV more adaptable than today's armored vehicles. This allows for upgrades of base armor as threats emerge and technology becomes available to counter them.

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As the IED threat continues to evolve, the FCS program is learning lessons from mine-resistant, ambush-protected crew protection research. In late 2007, the FCS manned ground vehicle team coordinated with Army Research, Development and Engineering Command/Army Research Laboratory to develop V-shaped hull armor protection kits. Fitting under the underbelly of the MGV hull, the kit generally acts to deflect blasts. Developed as a bolt-on accessory, the V-shaped mine kit keeps the MGV platform relevant in the future by allowing for further integration as armor and blast-deflection technologies develop. In addition, the MGV family represents a major paradigm shift in terms of survivability because the vehicle's operational capacity involves protection, beyond merely being able to take a hit.

"Unlike any current force vehicle, each MGV will incorporate an advanced hit-avoidance system that includes early warning sensors (radar, infrared cuing and laser warning), passive countermeasures (such as decoys) and active countermeasures to defeat ballistic threats before they hit the vehicle. This capability will address a range of threats that include rocket-propelled grenades, antitank guided missiles and tank-fired kinetic energy rounds," Col. McVeigh said.

FCS manned ground vehicles represent a fully networked armored vehicle that allows elements at all brigade echelons to detect and destroy the enemy in both beyond-line-of-sight and close combat engagements. This range of operability is achieved through a number of means, including enhanced target acquisition via unmanned air vehicles, unmanned ground vehicles and unattended ground sensors, using and being able to track advanced guided munitions, and moving with a significantly smaller auditory, thermal and physical signature.

The MGV mounted combat system, the non-line-of-sight cannon and the non-line-of-sight mortar will use networked battle command and sensor data to identify enemy combatants in complex environments and attack with a higher rate of fire. Precision munitions reduce the risk of collateral damage. "When FCS is fielded, the network maturation and computer-aided target identification and acquisition will aid the vehicle commander in selecting the target and munitions, and then the automation will take over," explained Col. McVeigh.



Soldiers of the Army Evaluation Task Force at Fort Bliss, Texas, enter a mock-up of the infantry carrier vehicle. Soldiers' suggestions and insight are vital in final production.

MGV Has Arrived

Today the FCS manned ground vehicle program is fully under way. There are dozens of ongoing tests and evaluations of MGV hardware, and production of prototypes is proceeding. The first of eight MGV variants, the NLOS-C, rolled off the assembly line at BAE Systems in June 2008. Two more NLOS-C prototypes are now undergoing mobility and live-fire testing. "More than 839 suppliers in 39 states are involved in FCS manned ground vehicle development, testing and production. This is truly a nationwide effort. We are leading a team that includes General Dynamics Land Systems and BAE Systems and combines the expertise of platform producers and system integrators to produce a family of vehicles based on a common chassis and a hybrid electric propulsion system. They will provide unprecedented survivability and lethality, which will result in reduced logistical and maintenance costs for the Army," said Gregg Martin, the FCS program manager at Lead System Integrator Boeing.

Like all components of FCS, the MGVs are not only being developed on computer screens. Soldiers of the Army Evaluation Task Force at Fort Bliss evaluate the equipment and make suggestions before final production. "Soldiers have greatly affected the MGV prototype design process. They have given us valuable insight on the operational shortcomings of current-generation manned vehicles and have assisted in the prioritization of desired improvements," Col. McVeigh said.

This year marks a pivotal time for MGV development. In January, Army and industry engineers and acquisition officials painstakingly conducted multidisciplined technical reviews to determine if the MGVs could meet cost, schedule and performance requirements in order to pave the way for detailed design and prototype production for the entire MGV program. These complex preliminary design reviews also set the stage for the FCS system-of-systems preliminary design review, in which engineers will demonstrate how the MGV will interact with all other FCS assets. Prototype production of the entire MGV family of vehicles will begin in 2011, with fielding slated for 2015. ★



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Precision Fires



Spc. Cula A. Alisan

"The analogy we use about the precision fires capability you have today is that you could put a HIMARS [high-mobility artillery rocket system] on a C-130 [aircraft] at Pope Air Force Base, N.C.; notionally fly it to Andrews Air Force Base, Md., near the Pentagon; offload the HIMARS in five minutes; and attack targets down in Virginia Beach, Va., with a guided MLRS [multiple launch rocket system] and the ATACMS [Army tactical missile system] missile capability," observes Col. Dave Rice, project manager, Precision Fires Rocket & Missile Systems (PFRMS).

By Scott R. Gourley

Serving Today's Warfighters

The fact is that today's precision fires have nothing to do with "notional" capabilities. Rather, those fires are being delivered in theater today, in close support of American and Coalition warfighters. Moreover, a number of ongoing development activities are under way to ensure that those precision fires capabilities will continue to support tomorrow's warfighters. The planners who are conducting these activities are clearly embracing a larger vision of fires through possible platform collaboration to support both field artillery and air defense mission requirements.



SSgt. J.H. Christopher III

The U.S. Army Bravo Battery, 2nd Battalion, 20th Field Artillery Regiment (2/20th), 4th Fires Brigade, 4th Infantry Division, launches a multiple launch rocket system rocket against an enemy Iraqi insurgent target as part of a tactical mission during Operation Iraqi Freedom.

"There are 33 launchers—both U.S. HIMARS [both Army and Marine Corps] and the M270A1 [Army], along with the British, who have the M270B1," Col. Rice explained. "The British, of course, are in support of the NATO mission in Afghanistan. And the only difference between the U.S. and the British version is that the British do not have the capability to fire the ATACMS missile. But those 33 launchers have been in both theaters, and together they have shot 1,056 guided MLRS rockets and more than 550 ATACMS missiles. Of those 1,056, the British have shot more than one third."

"The feedback we get from the field is that guided MLRS is a real 'game changer,'" Col. Rice said. "The overwhelming majority of these missions are shot in an urban environment, in many cases with troops in contact or in very close contact. What this allows you to do is shoot a guided MLRS, for example, at a range of up to 70 kilometers, and you can basically put the thing on a stop sign. It has tremendous accuracy, tremendous reliability and—with a 200-pound warhead—it also has tremendous lethality."

Rice added: "Again, there's been tremendous reliability on both the rocket and the missile sides. The platforms themselves have been performing superbly in a high-optempo environment. ... In fact, the average downtime of a launcher in theater is 13 hours. Whenever something goes wrong with a launcher part, we have a Lockheed Martin field support representative there. They figure out what part we need and send that order back to the United States. We pull it off the shelf and put it on a DHL plane, and it's over there pretty quickly."

Reiterating the game-changing aspects of the systems, Col. Rice continued, "[They've] really changed how commanders think about using fire support in an urban environment. Guided MLRS has been over there since September 2005. As soldiers and commanders developed more confidence in its capabilities, we really saw the usage rates go up. They even used it sometimes in unconventional ways. For instance, the classic urban target is very easy when you have bad guys in a building or you have an IED [improvised explosive device] factory. But there are some instances reported where a UAV [unmanned air vehicle] or some other sensor might pick up some insurgents emplacing IEDs, and for whatever reason they can't get ground troops in there or EOD [explosive ordnance disposal] in there. In those cases, they will just fire a volley of two or three rockets and take out the IEDs."

"My British colleagues have really developed confidence in it," Col. Rice continued. "Again, we're seeing the same pattern: As they use it, they see the results and gain more confidence, and it becomes the weapon of choice. It allows you to shoot things with standoff distances. It's not weather-dependent. You don't have to launch an airplane or a helicopter. It has tremendous accuracy. And it has tremendous reliability."

Looking Toward the Future

The Army's precision rockets, missiles and firing platforms themselves are all being considered or evaluated for a range of enhancements that will guarantee their continuing contributions in support of future U.S. and Coalition

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SCOTT R. GOURLEY, a freelance writer, is a contributing editor to ARMY Magazine.

warfighters. The alternative warhead program offers an excellent example. "There are currently two variants of MLRS. One is the unitary rocket with the 200-pound unitary warhead that we are using now. The other one is a DPICM [dual-purpose improved conventional munition] variant that has 404 dispensed 'grenades.' Of course, DPICM is designed for broadly dispersed, imprecisely located targets—the area target set. But the problem is that we have never been able to master a self-destruct fuze, and with the new cluster munition policy signed by the Secretary of Defense last summer, we just can't get there," Col. Rice said.

"There is still a *requirement* [to engage] those area targets, but, of course, without the scourge of unexploded ordnance on the battlefield. It took a while to get there, but we recently had a configuration steering board that allowed us to solicit technologies and to pick prototypes for a competitive prototyping phase," he added.

In an ongoing source selection process, the Army is expected to pick two prototype designs and, through a 20-month effort, integrate the prototypes onto rockets and run test firings at White Sands Missile Range, N.M.

"We'll shoot them against those types of targets, measure them and then pick the best one to go into engineering for production," Col. Rice said.

Current expectations project a "Milestone A" decision, followed by initial prototype contract award(s) in the late-March/early-April 2009 time frame.

Scalable lethality for the rockets presents another future technology under examination.

"We have a 200-pound warhead [on guided MLRS], but

Cannons Provide Critical Element in Precision Fires

Another key element in the precision fires equation involves the contributions and relevance of cannon artillery to current and future battlefields. Since the beginning of combat operations in Iraq and Afghanistan, thousands of news stories have reported on the role U.S. artillerymen have played in support of those operations, whether with their howitzers or their rifles. While the story of artillerymen taking on infantry roles to support operations in Iraq has taken center stage during the past two or three years, one web site has spent the last four years working to highlight the contributions of warfighters firing their howitzers in combat.

Launched by BAE Systems in 2005, www.cannonartillery.com is an online community dedicated to telling the story of cannons and raising awareness of the activities being carried out by U.S. cannon artillerymen.

The site is led by Mark Signorelli, a retired field artillery officer and Operation Desert Storm veteran who currently heads development of Army programs at BAE Systems' Armament Systems division, including the Future Combat Systems' non-line-of-sight cannon and mortar vehicles.

"While the headlines may not always show it, cannons have played a critical role in nearly all phases of combat operations in Iraq and Afghanistan," said Signorelli. "Our goal at CannonArtillery.com is to ensure that people recognize the significance of artillery and give our nation's cannoneers a community in which they can connect with each other and tell the story of the positive difference they are making on behalf of our nation."

Designed for and targeted toward artillerymen and the field artillery community, CannonArtillery.com serves as an information resource, demonstrating the critical role cannons play on the modern battlefield while providing artillerymen with a platform to interact with others. Popular site features include daily artillery news updates, stories from members, multimedia galleries, monthly trivia and artillery technology spotlights.

The site encourages all visitors to become members and receive regular updates on the latest cannon artillery news and happenings. CannonArtillery.com members are able to frame their involvement, whether periodically responding to trivia questions, sharing images and videos, or writing for the site.

With membership growing and traffic numbers increasing, CannonArtillery.com has proved popular among artillerymen, who have submitted hundreds of photos from their time around their howitzers. Many have shared their stories on the site and through monthly e-mail updates sent to members.

In May 2008, CannonArtillery.com featured an interview with Maj. Michael Tomberlin, then a reporter with the *Birmingham* (Ala.) *News* and an active member of the 117th Field Artillery. Stationed in Ghazni, Afghanistan, at the time of the interview, Maj. Tomberlin gave a first-hand perspective on the role cannons serve in today's fight. "Artillery is still a dominant force, and we see its use in very traditional ways here in Afghanistan and throughout the global war on terrorism," he said. "It remains a responsive and accurate way of shaping the terrain in our favor, and that much hasn't changed, just the nuances in which it is employed."

In addition to highlighting ongoing artillery operations, the site tracks the ongoing transformation of the field artillery by closely following and linking to the latest news from field artillery leadership and by tracking the latest developments in cannon technology.

Signorelli said the site is always looking for ways to improve, and he encourages artillerymen to get involved by submitting their stories, photos and feedback about the site and signing up to become site members.

maybe you don't have a 200-pound warhead target," Col. Rice observed. "Maybe you only want to take out a room, instead of a whole building."

The resulting investigations are exploring potential methods to alter the warhead or fuzing in flight to decrease the warhead to various fractions of its full potential, unofficially dubbed Dial-a-Yield.

"That's very early science and technology work right now," Col. Rice noted. "And some of that work is going on in the lab across the street here [at Redstone Arsenal, Ala.], in the Aviation and Missile Research Development and Engineering Center."

He added that moving-target engagement is another potential enhancement being explored by both the Army and contractor team.

"The other thing that we're working with is an extended range [rocket]," Col. Rice said. "If guided MLRS goes out to 70 kilometers and the notional minimum range on the ATACMS missile is 130 kilometers, how do you cover the gap between 70 kilometers and 130 kilometers? We're looking at ways to extend the range of the guided MLRS rocket out to whatever we can get—100, 110, 120 or 130 kilometers—without losing any of our accuracy."

On the launcher side, Col. Rice noted that PFRMS representatives are looking at a comprehensive recapitalization strategy. Noting that the Army and Congress have made decisions to support the sustainment of the Bradley, Abrams and Paladin platforms in the heavy fleet, he highlighted the fact that the same processes have not been undertaken for the rocket and missile fire support fleet.

"We're trying to look at ways to make launchers more survivable, cheaper to maintain, more deployable and more reliable," Col. Rice said. "One interesting thing that we're looking at is the idea of a common launcher. As the Air Defense School [Fort Bliss, Texas] and the Field Artillery School [Fort Sill, Okla.] merge, the thought is that HIMARS is very deployable. It's a great platform to be a common launcher, so let's see if we can shoot some air defense munitions off of that."

One result of these investigations, which may take place soon, would involve a demonstration firing of a surface-launched advanced medium-range air-to-air missile (SLAMRAAM) from a modified ATACMS pod mounted on a HIMARS launcher.

As with guided MLRS, there are also two versions of the 300-kilometer ATACMS—a cluster-type antipersonnel/antimateriel (APAM) and a 500-pound unitary warhead.

"We are trying to get a service life extension program (SLEP) funded by the Army," Col. Rice explained. "Most of the current inventory of ATACMS—about 75 percent of it—is the cluster munition variety. With the policy now in effect, that percent of the inventory is now unusable. So we would propose to take older, Block I [APAM warhead] missiles whose shelf life is expiring, reuse as much as we can—rocket motors, IMUs, onboard electronics and so on—but replace the APAM submunitions with the unitary warhead, starting the 'shelf-life clock' all over again and extending the usable inventory not only in numbers, but in time as well."

One of the challenges in establishing the SLEP could stem from the fact that the ATACMS program was terminated by the Army as part of strategic resourcing decisions.

"Yet the requirement for those types of targets at those ranges remains," Col. Rice said. "In fact, in my view, if we walk away from ATACMS, then we are almost conceding the deep fight to the Air Force."

Supporting current operations through their field service representatives and future operations through targeted internal investments, prime contractor Lockheed Martin is also continuing more than a quarter-century of focus on warfighter support.

"The MLRS family of munitions has been around for more than 25 years now," noted Scott Arnold, vice president for Precision Fires and Combat Maneuver Systems at Lockheed Martin Missiles and Fire Control. "It has transformed over that time frame into a very current and relevant set of munitions and systems. Now we are working with the Army to shape future capabilities that will continue to make the systems relevant in the future fight."

He continued: "We're investing, without IR&D [independent research and development] dollars, in a number of things that Col. Rice described. We're looking at the extended-range variant. We're looking at air-defense missile variants to be fired out of the HIMARS launcher. And we're working with the Army to do the demo to fire the SLAMRAAM out of the HIMARS launcher.

"One of the key things here is that we have gotten the message from the Air Defense School and the Field Artillery School about looking for common materiel solutions for both the field artillery and the air defense missions. We're working with the Army to look at ways to do that on the platform as well as in the munitions environment," Arnold said.

Returning to the question of relevance, Col. Rice offered an observation made by some German Coalition members who had recently been to see him: "Yes, this stuff has been around 25–30 years. In the beginning, in the 1970s and 1980s, MLRS was designed to shoot a huge amount of DPICM rockets out there in case the Soviet horde burst through the Fulda Gap. But now, with the evolution of materials and information technology and the development of precision munitions, our stuff today—in the urban fight, the counterinsurgency fight and even the traditional full-blown land fight—are just as relevant as they were 30 years ago."

"MLRS products are in 19 nations across the globe," Col Rice concluded. "The newest countries to join the MLRS family are the UAE and Singapore. And others are possible. Clearly the performance of the platforms and the munitions is garnering a lot of worldwide interest in these systems for countries that are interested in modernizing or upgrading their indigenous defense capabilities." ★



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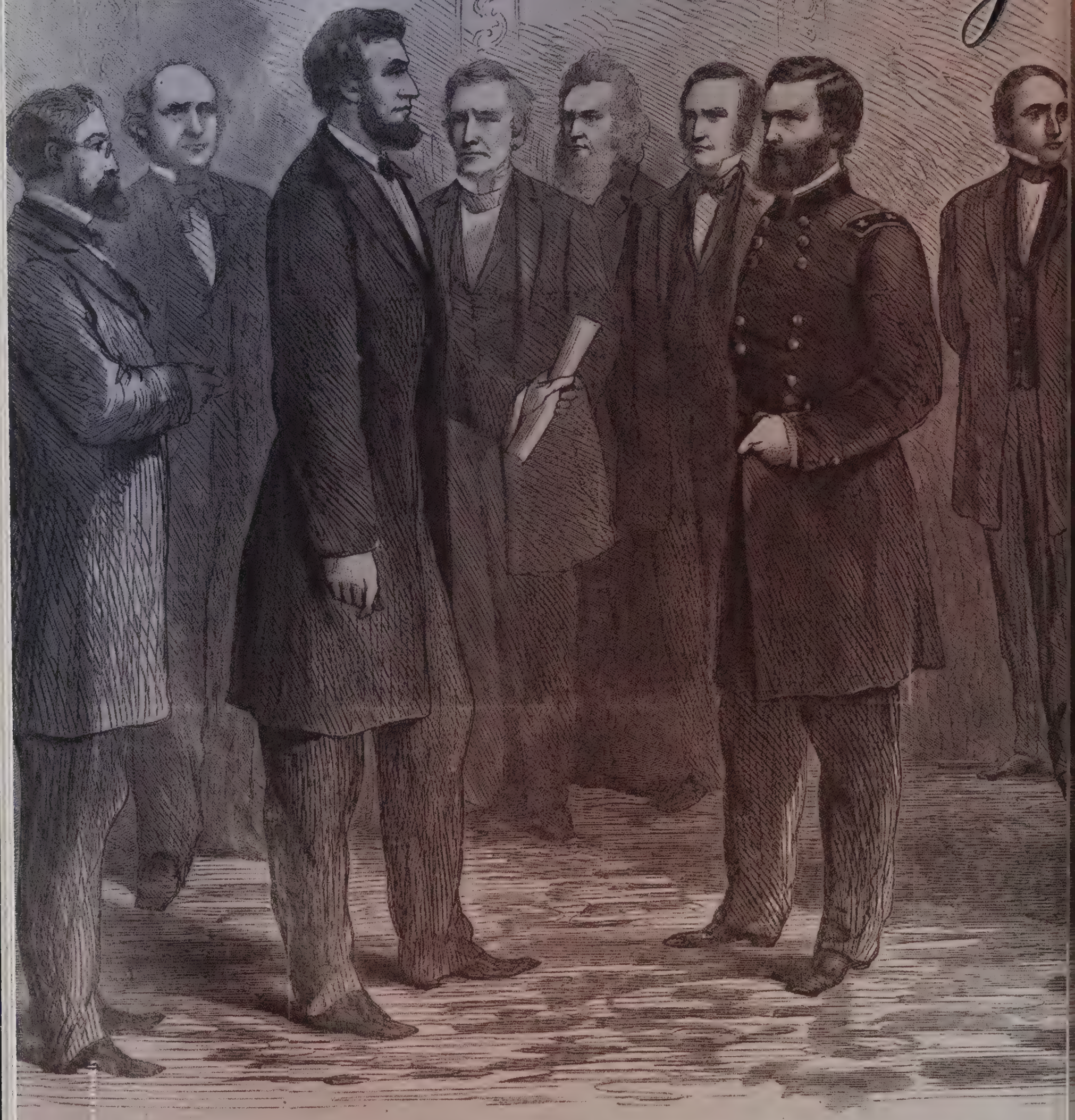
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Lincoln and the Army:



GENERAL GRANT RECEIVING HIS COMMISSION AS LIEUTENANT-GENERAL FROM PRESIDENT LINCOLN.

A Model Civil-Military Partnership



By Col. Cole C. Kingseed
U.S. Army retired

History is replete with examples of chief executives making important adjustments before determining the best military team to lead the nation's armed forces in time of war. In recent months, historians have remarked on the political sagacity of President Barack Obama borrowing a page from one of his most illustrious predecessors in forming a "team of rivals" as he begins his presidency. As did Abraham Lincoln before him, President Obama has included a number of prominent political adversaries in his administration as he assumes the nation's highest-elected office in the midst of a major war. On the occasion of the bicentennial of Lincoln's birth, the current Commander in Chief might profit by reflecting on the challenges encountered by our 16th President during the Civil War, before he settled on Ulysses S. Grant to serve as the "general in chief" of the Union armies.



President Lincoln meets with his generals on Antietam battlefield, October 1862.

National Archives

In his assessment of the Lincoln presidency, *Tried by War: Abraham Lincoln as Commander in Chief,* James M. McPherson states that "Abraham Lincoln was the only President in American history whose entire administration was bounded by war." From the day he took the inaugural oath until his assassination four years later, Lincoln's predominant task was to win the Civil War. Accordingly, he established policy objectives, articulated war aims and searched for a team of commanders, whose principal chore was to develop a military strategy to implement Lincoln's political objectives.



Mathew Brady

Maj. Gen. George B. McClellan

Not surprisingly, Lincoln articulated his intent to crush the armies of the newly formed Confederate States of America. In repeated messages to his army commanders, Lincoln stressed that the destruction of armies, not the capture of cities, was the surest path to winning the war. Finding the right commanders who shared this vision was a more formidable challenge.

The generals best positioned to implement Lincoln's goals during the first year of the conflict were Commanding General of the U.S. Army Bvt. Lt. Gen. Winfield Scott and his immediate successor, Maj. Gen. George B. McClellan. Scott, the aged veteran of the War of 1812 and the hero of the Mexican-American War, devised the Anaconda Plan to slowly strangle the Confederacy. Maritime strategies by their nature are long-term strategies, and, with enemy armies on the outskirts of the federal capital, Lincoln required a far quicker solution. Following the failure of Union forces at First Manassas/Bull Run in July 1861, Lincoln summoned McClellan, fresh from his victories in western Virginia, and entrusted him with command of the newly formed Army of the Potomac. A few months later, McClellan was appointed general in chief of all Union armies. Despite constant urging from Lincoln, McClellan simply would not fight. Lincoln finally relieved McClellan of command in November 1862 because of the general's inactivity following the Battle of Antietam.

Among the series of commanders of the Army of the Potomac who followed McClellan, including Major Generals Ambrose Burnside, Joseph Hooker and George Meade, Lincoln repeatedly reiterated his desire to seek a decisive engagement over Gen. Robert E. Lee's Army of Northern Virginia. In each case, the military commanders failed to interpret Lincoln's command intent. Burnside initially moved quickly but squandered an opportunity to attack Lee before Lee was able to concentrate his entire force at Fredericksburg, Va. Then Burnside horribly mishandled the Army in a series of ill-fated attacks against Lee's army, which was entrenched in an impregnable position.

Lincoln thought he had found a solution in Hooker,

COL. COLE C. KINGSEED, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

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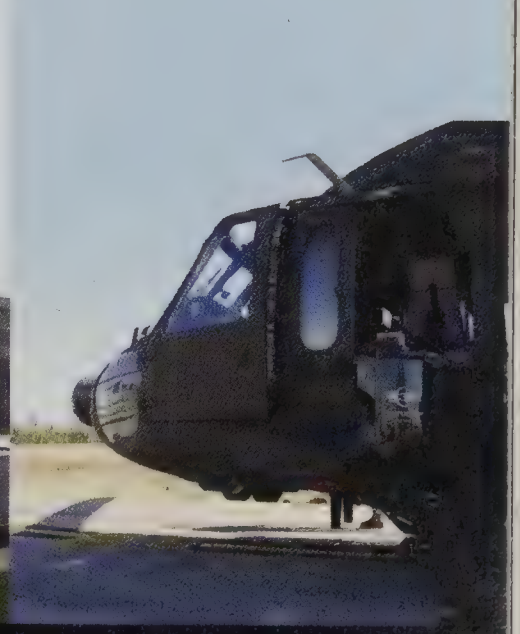
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Mathew Brady

Maj. Gen. Ambrose E. Burnside



Mathew Brady

Maj. Gen. Joseph Hooker

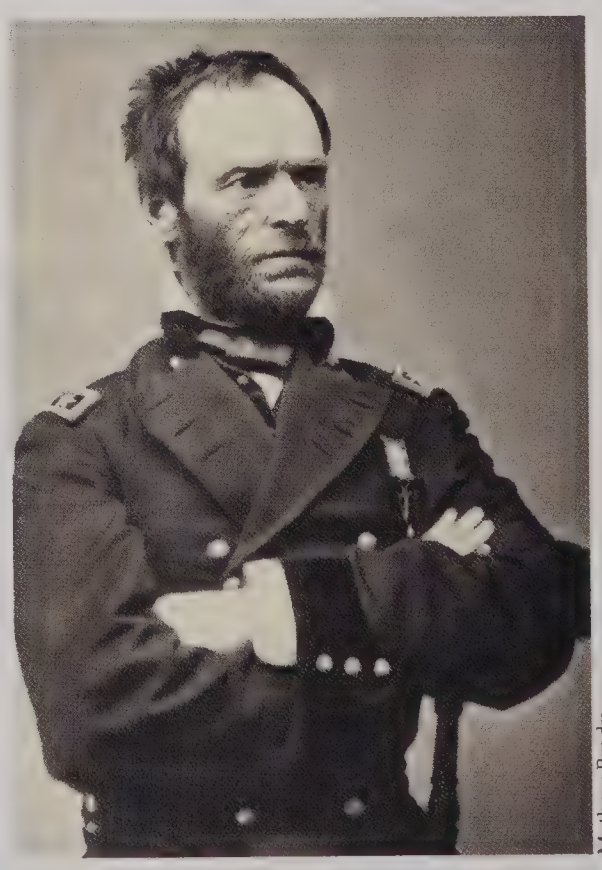


Mathew Brady

Maj. Gen. George Meade

whom he appointed commanding general of the Army of the Potomac despite his personal reservations over Hooker's claim that the country needed a dictator. Lincoln wrote to Hooker: "It was not for this, but in spite of it, that I have given you the command. … What I now ask of you is military success. … I shall assist you, as far as I can. … Go forward, and give us victories." Hooker failed badly at Chancellorsville, Va., in May 1863, and with Lee's army invading Pennsylvania in June, Lincoln reminded Hooker again that Lee's army, not Richmond, was the true objective. Hooker thought otherwise, and his impulsive resignation was accepted by Lincoln.

Meade followed in the commander's role and won a tactical victory at Gettysburg, but he failed to follow up his success. When Lee escaped to Virginia, Lincoln prepared a message to Meade: "My dear General, I do not believe you appreciate the magnitude of the misfortune involved in Lee's escape. He was within your easy grasp, and to have closed upon him would … have ended the war. … Your golden opportunity is gone, and I am distressed immeasurably because of it." After careful reflection, Lincoln filed the message, relieved that at least a tactical victory was better than nothing. Yet in Lincoln's mind, Meade had failed the test of command and was not the general who would prosecute the war in the manner that Lincoln intended.



Mathew Brady

Maj. Gen. William T. Sherman

As Lincoln searched for the right commander in the Eastern Theater, the most successful Union strategy was being implemented in the Mississippi River Valley and along accompanying tributaries. There, a series of commanders, most notably Ulysses S. Grant and William T. Sherman, emerged. Grant was clearly the rising star, having destroyed two Confederate armies with his capture of Fort Donelson, Tenn., in February 1862 and Vicksburg, Miss., in July 1863. Though he had not met Grant, Lincoln became his staunchest ally because Grant demonstrated the tenacity that Lincoln sought. Even when Grant's tactical conduct of the 1862 battle at Shiloh, Tenn., was called into question because the North endured excessive casualties, Lincoln stated, "I can't spare this man. He fights!" Later Lincoln would identify what Grant possessed and so many of his commanders lacked: "They [politicians and many military commanders] have no idea that the war is to be carried on and put through by hard, tough fighting—that it will hurt somebody."

Vicksburg convinced Lincoln that Grant was the type of general he needed to win the war. A week following Vicksburg's capitulation, Lincoln wrote Grant to express his "grateful acknowledgement for the almost inestimable service you have done the country." He candidly informed Grant that as President, he thought that Grant had made a serious error in his approach to Vicksburg. Lincoln continued, "I now wish to make the per-



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One Tough Animal



Mathew Brady

After Major Generals Burnside, Hooker and Meade failed their Commander in Chief's mission, in 1864 Lincoln selected Ulysses S. Grant to pursue and defeat Lee's Army of Northern Virginia.

sonal acknowledgment that you were right and I was wrong." Lincoln had found his man.

Before he could summon Grant to Washington, D.C., the Confederates won a victory at Chickamauga in northwest Georgia in September 1863, and the Union Army of the Cumberland fled to the city of Chattanooga, where they were immediately besieged. Lincoln had had enough. Reorganizing several military departments into the Military Division of the Mississippi, he placed Grant in command and authorized him to take whatever measures were necessary to remedy the situation. Grant relieved several commanders, rushed in reinforcements and within a month routed the Confederate Army of Tennessee.

The bill restoring the grade of lieutenant general of the Army, a rank previously held only by George Washington (and Winfield Scott as a brevet appointment), had been passed by Congress and became law in February 1864. Grant's nomination was sent to the Senate on March 1 and confirmed the next day. President Lincoln summoned Grant to Washington, D.C., to receive his commission. On March 8, Grant arrived in the nation's capital to take command of all the Union armies. His entrance into Washington "was consistent with his image as an unpretentious man of action," according to author Doris Kearns Goodwin in *Team of Rivals.*

Upon arrival at Washington's historic Willard Hotel at dusk, accompanied only by his son Fred, Grant was not recognized by the desk clerk. He was initially told that nothing was available except a small room on the top floor, but once the clerk looked at the signature in the register—*U.S. Grant and son, Galena, Illinois*—the general's accommodations were switched. After a private dinner, Grant prepared his son for bed and strolled over to the White House to meet the Commander in Chief for the first time.

Grant arrived at the White House, where a large crowd had gathered for the President's weekly reception. Grant walked along modestly with the rest of the crowd toward the President. Meeting Grant for the first time, Lincoln remarked, "Why, here is Gen. Grant! Well, this is a great pleasure." After a brief exchange, Lincoln turned Grant over to Secretary of State William H. Seward to negotiate the crowd. As Goodwin describes it, the President was "delighted by the crowd's embrace of Grant, [and] he willingly ceded to the unassuming general his own customary place of honor, fully aware that the path to victory was wide enough, [as a young colonel said], for the two of them to 'walk it abreast.'"

After an hour, Grant returned to Lincoln, who was waiting with Secretary of War Edwin Stanton. They discussed the next day's ceremony at which Grant would formally receive his commission. Then Lincoln conferred privately with Grant to establish the general parameters of what would be the most successful civil-military partnership in American history.

According to Grant's memoirs, Lincoln stated that he had "never professed to be a military man or to know how campaigns should be conducted, and never wanted to interfere in them: but that procrastination on the part of commanders, and the pressure from the people [of] the North and Congress, *which was always with him,* forced him into issuing his series of 'Military Orders.' ... [Lincoln] did not know but they were all wrong, and did know that some of them were. All [Lincoln] wanted or had ever wanted was someone who would take the responsibility and act, and call on him for all the assistance needed, pledging himself to use all the power of the government in rendering such assistance." Grant then assured Lincoln "that [he] would do the best [he] could with the means at hand, and avoid as far as possible annoying him or the War Department." Grant's initial interview was over.

Grant's account of his meeting with Lincoln doesn't

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Lt. Gen. Grant and his staff

entirely ring true, according to McPherson. Lincoln "*did* want to know what Grant was going to do, at least in a broad strategic sense." In April 1864, Lincoln advised Grant that as for the tactical "particulars of your plan, I neither know nor seek to know."

Grant wanted to maintain his headquarters in the West, but according to McPherson, "Lincoln made it clear that he wanted him to come east 'to see whether he cannot do something with the unfortunate Army of the Potomac.'" Two of Grant's initial decisions were to promote Sherman to command in the West and to retain Meade as commander of the Army of the Potomac. The latter was an uncomfortable arrangement, as Grant would eventually establish his field headquarters in close proximity with Meade's headquarters.

Lincoln also confessed his frustration that in the past, Union armies seemed intent on securing territorial objectives rather than focusing their efforts on the destruction of enemy armies. In addition, it seemed that the various Union armies seldom operated in concert. Lincoln had previously—and repeatedly—suggested that Buell (commander of the Union Army of the Cumberland) and Halleck (Commanding General of the Army), among others, devise a coordinated strategy to "move at once upon the enemy's whole line so as to bring into action our great superiority in numbers." Time and again the generals ignored him. Grant's coordinated strategy—to have the smaller armies serve a pin-down function, while the principal Union armies in the West and in the East moved simultaneously against the main Confederate armies in the field—impressed Lincoln.

Following his meeting with the President, Grant immediately conducted an inspection of his principal armies and conferred directly with his commanders, presenting his general outline for a concentrated movement of all federal armies with the expressed purpose of destroying the Confederate armies to their respective fronts. From late March 1864 to the onset of the Overland Campaign in May, Grant visited Washington, D.C., once a week to confer with the Secretary of War and President Lincoln.

Within a month of receiving his commission as commanding general of all Union armies, Grant issued orders to all of his commanders, outlining his general intent for the upcoming campaign. Excerpts from his orders to Sherman and to Meade, his two senior commanders, indicate that Grant fully comprehended Lincoln's military objectives.

To Sherman, Grant wrote, "It is my design, if the enemy keep quiet and allow me to take the initiative in the spring campaign, to work all parts of the Army together and somewhat towards a common center. … You, I propose to move against Johnston's army [Confederate Army of Tennessee], to break it up and to get into the interior of the enemy's country as far as you can, inflicting all the damage you can against their war resources. I do not propose to lay down for you a plan of campaign, but simply lay down the work it is desirable to have done and leave you free to execute it in your own way."

A similar message went to Meade: "So far as practicable, all the armies are to move together and towards one common center. … Sherman will move at the same time you do, or two or three days in advance, Joseph Johnston's army being his objective point, and the heart of Georgia his ultimate aim. … Lee's army will be your objective point. Wherever Lee goes, there you will go also."

Since Lee was the principal threat, Grant accompanied Meade's Army of the Potomac. In the campaign that followed, Grant and Meade endured 55,000 casualties within six weeks, but Grant informed Lincoln that "there is to be no turning back." Later, Grant telegraphed his Commander in Chief: "I propose to fight it out on this line if it takes all summer." It took all summer, all autumn and all winter, but the outcome was never in doubt. With Lee pinned into the defense of Richmond, it was only a matter of time before the Union would prevail.

Lincoln never lost faith in Grant and was willing to endure political fallout as casualties mounted. Upon receipt of Grant's August 1864 telegram stating that Grant intended to hold Lee in the trenches of Petersburg until the latter surrendered, Lincoln wrote, "I have seen your dispatch expressing your unwillingness to break your hold

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In April 1865, Lee surrendered to Grant at the McLean House at Appomattox, Va.

where you are. Neither am I willing. Hold on with a bulldog [grip], and chew and choke, as much as possible."

On April 2, 1865, Grant broke Lee's line at Petersburg. Lee abandoned Richmond and fled west. Lincoln urged pursuit, directing Grant: "Gen. Sheridan says, 'If the thing is pressed, I think that Lee will surrender.' Let the thing be pressed." A few days later, Lee surrendered the Army of Northern Virginia at Appomattox Court House. The war was over.

In retrospect, the Lincoln-Grant partnership was the most successful command team in American history. At its foundation was a Commander in Chief who clearly articulated his political and military objectives and his command intent. After careful screening, often by trial and error, Lincoln discovered a general who did not always agree with the President's policies, but one who shared Lincoln's vision of how to end the war. By Grant's own admission, he had read the remarkable series of debates between Lincoln and Douglas a few years earlier, but he had by no means ever been a "Lincoln man" in that contest. Yet Grant had always recognized the President's great ability, and he never questioned Lincoln's constitutional role as Commander in Chief.

Open communication between Lincoln and Grant further cemented their relationship. Upon conferring Grant's commission, Lincoln informed Grant that he had full confidence in Grant's abilities and that he need not know all the intricacies of Grant's strategy. Grant acknowledged that Lincoln "was willing to trust his generals in making and executing their plans," but this willingness was tempered only if those plans followed Lincoln's intent to move rapidly and to crush the opposing armies. A review of Grant's detailed correspondence in the final year of the war reveals a commander who kept the President fully informed of all major decisions and troop movements.

Herein lay the reasons why Lincoln and Grant were so successful. Their relationship was founded on a shared strategic vision and a mutual respect for each other's abilities and constitutional roles, not political affiliation or personal ambition. Clear communication and adherence to the expressed goals of the President characterized Grant's actions throughout the war. In turn, Lincoln never wavered in his support for Grant, despite political pressure to relieve Grant from command. Those whom Lincoln did relieve were commanders who sought personal aggrandizement and those who failed to develop a coherent strategy that fulfilled the President's intent to act decisively to destroy the enemy armies.

In selecting his own defense team and in articulating his command intent in the global war against terrorism, President Obama can clearly glean lessons from how Lincoln and Grant achieved success in the most catastrophic war in American history. It took Lincoln three years to find Grant and to entrust the fate of the Union armies into his hands. Given the current international crisis in Iraq and Afghanistan, President Obama does not have that luxury of time, but he possesses one advantage that Lincoln did not—he has a proven team in place. Doubtless the current President will make adjustments, but by clearly articulating his intent and his war aims, he will have taken the initial step toward military success. By emulating President Abraham Lincoln during this nation's greatest crisis, he follows a superb role model. ★

BY BEN STEIN



Getty Images/Joel Sartore

Ben Stein says that when he flies into DC, "I always bear down on my seatmate and say, 'Look at that! That's the most beautiful city in the world.' "

Home Sweet Home

I've lived out west more than 30 years, but LA doesn't compare to my hometown of Washington—DC's skyline is spectacular, the people aren't crazy, and the soul of it all is Arlington Cemetery

My life is about travel. I land at an airport, struggle off the plane with my heavy Willy Loman suitcase, and head for ground transportation. The airports look the same to me. Milling travelers. Bars. Billboards for hotels. Overpriced pretzel stands.

I face ground transportation with dread: What tiny hotel room awaits me? What scary people will be at the registration desk? How will this city unnerve me?

This is true even for LAX, airport of Los Angeles, the city that has been my primary home since 1976. It's a hideous ride from LAX through decaying shopping areas, fast-food outlets, and jammed freeways toward my house. There is not one attractive sight until you get to the gardens of Beverly Hills, and that's a good half hour from LAX.

It's different when I arrive at DCA. (Please don't even mention IAD—Dulles is the worst airport in the world.) When I get off the plane at Reagan National, I am home. I am back in the city where I was born one frosty morn. The people in the terminal at Reagan National look like solid citizens. The billboards are for subjects like treating the oil companies with some sanity. The guards at TSA screening look as if they are there to help, not torture. The man who drives me to my apartment at the Watergate always has some gossip about people I know. And at the Watergate, the same people have been working the doors and phones since my parents bought their apartment—now mine—in 1972.

Well, maybe not since 1972, but for a long time.

From my apartment I can see the Potomac River, see the kids sculling on the water in the day, see the moon over Virginia by night, see my parents' furniture from the Depression, cook an egg in my parents' frying pan, open up the mail—I am home. More home than in my home in Beverly Hills or my home in Malibu, just home, and out the door I go with my pal Russ and my pal Mike and my pal Aram, down to the Georgetown waterfront.

If it's summer, I see the college kids and smile modestly as a few say, "That's Ben Stein." I can go to Bangkok Joe's and eat tuna satay and watch the respectable-looking people stroll by. Because if there's one thing about the people in Washington, it's that they look respectable.

I know all of them aren't. I know this because I look respectable and I'm not. But the men dress like men, with jackets and ties, and the women look normal and not like truck-stop prostitutes. I don't know what they do after they've had a few drinks, but when I see them on the

Ben Stein is a writer, actor, lawyer, and economist living in Beverly Hills.

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Home Sweet Home

street, they look respectable.

And then when I get back to my apartment, I can lie on my bed and see the lights of Rosslyn again. Back in the 1950s, all that was there was pawnshops and fireworks stands. It has changed—now the office buildings light up the night sky. I go to sleep thinking I am home.

I have gotten ahead of myself. When the plane starts to land at DCA, I can see the government buildings that mark the capital of the world. Above all, the Capitol, the summit of man's achievements in government, which symbolizes that we trust the people to govern themselves (with the help of an army of lobbyists). The Washington Monument, which tells us we had a leader who preferred to give the leadership back to the people. The Jefferson Memorial, to my mind the most beautiful building on Earth. The buildings along the Mall—the Hirshhorn, the Freer, the Department of Agriculture, the Smithsonian—where men and women toil not to become rich but to educate and enlighten and keep track.

I always bear down on my seatmate and say, "Look at that! That's the most beautiful city in the world, and it's not in France, not in Italy, but in America."

On the ride in, you see the buildings underlined by the Potomac, a shimmering underscore for the permanence of our symbols of republican institutions. I always say to Bob, my driver, "Look at that. The city glows."

I often think to myself: Why aren't I living here in DC? Why am I so far away in Beverly Hills?

Oh, right. It's the humidity and heat. But maybe next year.

Oh, Washington, I love your friendly sedan drivers from Senegal and Mauritania and Iran, who know their way to CNN and Fox through tunnels that I never even knew existed, under freeways and government buildings so I get to be on camera and talk as if I were shot out of a gun. I love your friendly clerks at the Watergate Safeway who tell the new boys and girls that I've been coming there longer than they have worked there—for 20, 30 years. I love the woman at the deli counter who finds me a nice big fried-chicken wing—"not some little pigeon wing," as she says. I love your GW coeds, who have had the same look on their faces since I used to study at the GW library when I was in high school, a look that says they know they are only young once and they don't know what to do about it.

I love the beautiful outlying towns of the Washington "metroplex." The main shopping street of Middleburg, with its ice-cream parlor and the beautiful little Episcopal church with its family pews and kneelers with embroidery of sporting dogs. I love the fields between Middleburg and Upperville and the Mellon church with its Bretagne design. I love going over the Bay Bridge and landing on the Eastern Sho' and making my way to the Tidewater Inn and to Oxford, where I had so many crab-cake meals with my parents, who are so keenly missed. I always thought I would own a farm on the Eastern Shore, but it's too humid, too. Plus, even for a wild plunger like me, it's gotten too expensive.

I still love Silver Spring, especially Sligo Creek Park, where I went on so many walks, thinking the long thoughts of youth, walking through the grass to find my way home by listening for the Army-McCarthy hearings coming from our TV set. I love Falls Church, the King David cemetery, where my parents lie and where my wife and I will someday lie near them. Leafy and green and with so many familiar names lying near them.

But I want to get back to this: People around Washington don't look crazy. Humans look so amazingly crazy in Southern California. So off-the-map crazy. So desperate no matter how rich they are. But in DC, men and women look as if maybe they have enough.

Yes, I know the new rap on Washington is that it's as money-crazy as everywhere else. I know that the "new Washington" has lawyers who make millions, lobbyists who make hundreds of thousands, and the Carlyle Group, founded by old pals from the Nixon years, and they have maybe billions. I know that real estate has gotten expensive by local standards. I know that even a GS-15 cannot really live *la dolce vita* in Washington any longer. And I know that in my beloved Montgomery County, parents often feel as if they have to send their kids to private schools, and they ain't cheap.

I know, in a word, that the Washington I grew up in, the Silver Spring I grew up in, those places have changed. I know that the days when an in-grade GS raise was occasion for getting a new Chevy are gone.

I don't care. I don't really care about those Carlyle types at all, except for Fred Malek because he and I used to hang out at the Georgetown Safeway together. I don't care about the people who make huge bucks. I'm around rich people a lot and I don't find them particularly interesting

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And they certainly have nothing to do with what Washington is to me.

My mother, God bless her soul, used to literally get sick to her stomach when she was in a room of rich people. I feel very much the same way if they start bragging. And as for Washington's becoming like other cities that worship the golden calf, guess what? I've been everywhere else, and DC is not as money-crazy as everywhere else.

There is something vestigial about that civil-service mentality in which, if you had a steady paycheck and good fringe benefits, you were fine. The main cause of insane ambition is the wish to overtake the neighbors who are richer than you are. But if everyone is middle class and getting a green check, as they all were when I was in the civil service and growing up in Silver Spring, there is not a lot to be jealous of.

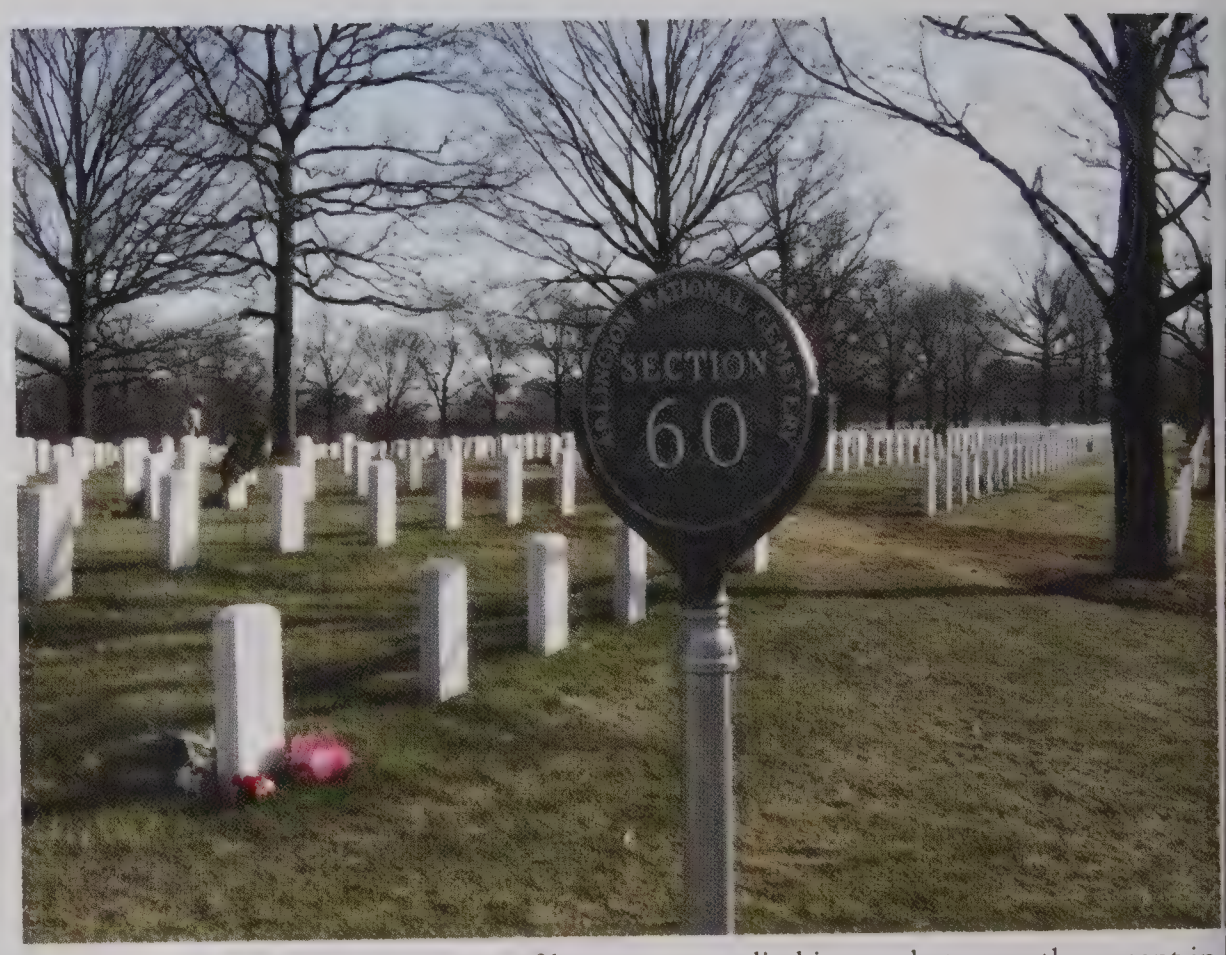
Some of that glorious attitude, the socialism without dictatorship, still lingers. Not all of it. But in Washington you can still be respected, still be admired, just for doing your job and for being a regular Joe or Jane without having to be rich.

Maybe more to the point for me, you can be respected for being a pundit or a media face and voice without owning your own plane, which is out of the question in Los Angeles. You can go to brunch at the Cosmos Club and see men and women who have shaped national and international policy and don't even fly first class or have a swimming pool, and they are still respected.

The walls at the Cosmos have portraits of Nobel Prize winners and Pulitzer Prize winners, not hedge-fund speculators. The question is about brains used for the public good, not about cunning to get rich quick. You can be respected for something other than chasing the buck.

Incomparably more important, the key industry in Washington in terms of prestige and size is defending freedom. The men and women in the military are the heart of Washington. The guys prowling the rings of the Pentagon, the guys in satellite offices, the gals keeping track of how the defense of humanity is going—they are the backbone of Washington, at least to me. Their lives have zero to do with getting rich quick. They may someday have a Corvette and a split-level home, but they will never be on the *Forbes* list.

And they don't care because they know in their hearts they're doing what's right. That can't be bought. The feeling a soldier has when he has faced combat and come out on the other side cannot be bought. The feeling a military wife has when she has spent a year alone taking care of her kids while her husband was deployed—that cannot be bought. And it conveys a self-worth that a billion dollars of hedge-fund money cannot touch.



That's why on my trips to DC, which are growing more frequent year by year, the twin hubs of Washington for me are Walter Reed Army Medical Center and Arlington National Cemetery. That's where you see the real Washingtonians, in the sense that they pattern their lives after the life of Washington, father of the nation.

At Walter Reed, you see the wounded soldiers in pain but also bound up with pride at a job well done. You see the wives and families who stay at the Silver Spring Hilton and come to spend the day sitting with their beloved with his tubes and his Percodan and without his legs. You see the nurses and doctors and orderlies and volunteers and you know: This is it. This is what it's all about. Without people like this, there is no Washington, no America, no nothing.

These people are galaxies away from the megabuilders and raiders. They never brag. They never ask for recognition. They just give their lives and their legs to keep us protected. They, not the people in glossy pages in magazines, are what I love about Washington. And the people in the military look the least crazy of all.

And then you come to the soul of everything: Arlington. Green and leafy. Magnificent vistas over endless rows of stones, each one marking a man or woman who served and offered up his or her life for country and freedom. Not many of those with the stones died in combat recently, except in section 60 and thereabouts, where the men and women from the Iraq and Afghanistan wars are buried. That's where the activity is nowadays. The families weeping at the gravestones. The buddies in their flight suits visiting the buddy who went down in a helicopter. The high-school pals leaving a football jersey. The wives leaving flowers and stones and a copy of the latest Harry Potter book.

That's where the soil is still damp and soft from recent interments. The people standing in tears on this ground have halos around them.

I have always found it a sign of the astonishingly deep vein of patriotism in this country that men and women who have grown up in small towns and big cities all over the map come to Washington to be buried. They come as if to a holy place, a place where their service will redeem them.

Maybe that's the essence. There is a holiness about Washington, DC. It goes way beyond anything the moneymen will ever be able to do. It goes way beyond the mansions of McLean or Potomac. The repository of the nation's hopes and aspirations for the glory of man under God—we are still allowed to say that, right?—is not on Wall Street. It's not in Greenwich. It is in Washington, DC.

And when Bob the driver takes me back to DCA to go wherever I am going, it's this feeling I have: that I am leaving a place not in the business page, not even in the political page, but a place in the heart. Eternal Washington, of the clerks in the Safeway and the eternal flame at Arlington—always my home sweet home.

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To: Company Commanders
From: Company Commanders

Leadership and Laptops on Combat Deployments

We recently asked a line-company platoon leader in Iraq how he spends most of his time. His answer? PowerPoint! We pressed him on this, but he wasn't budging. "I'm dead serious, guys," he replied. "The one thing I spend more time on than anything else here in combat is making PowerPoint slides. I have to make a storyboard complete with digital pictures, diagrams and text summaries on just about anything that happens. Recon a water pump? Make a storyboard. Conduct a key leader engagement? Make a storyboard. Award a microgrant? Make a storyboard." When we consider the amount of time that our platoon leaders spend on CONOPS, TIGR net, patrol debriefs, awards, NCOERs, sworn statements and so on, it becomes clear just how much time these green-tab leaders are spending alone in front of a computer screen. So we asked our fellow company commanders: Does this jibe with what you are experiencing? Is this what we want our platoon leaders doing?

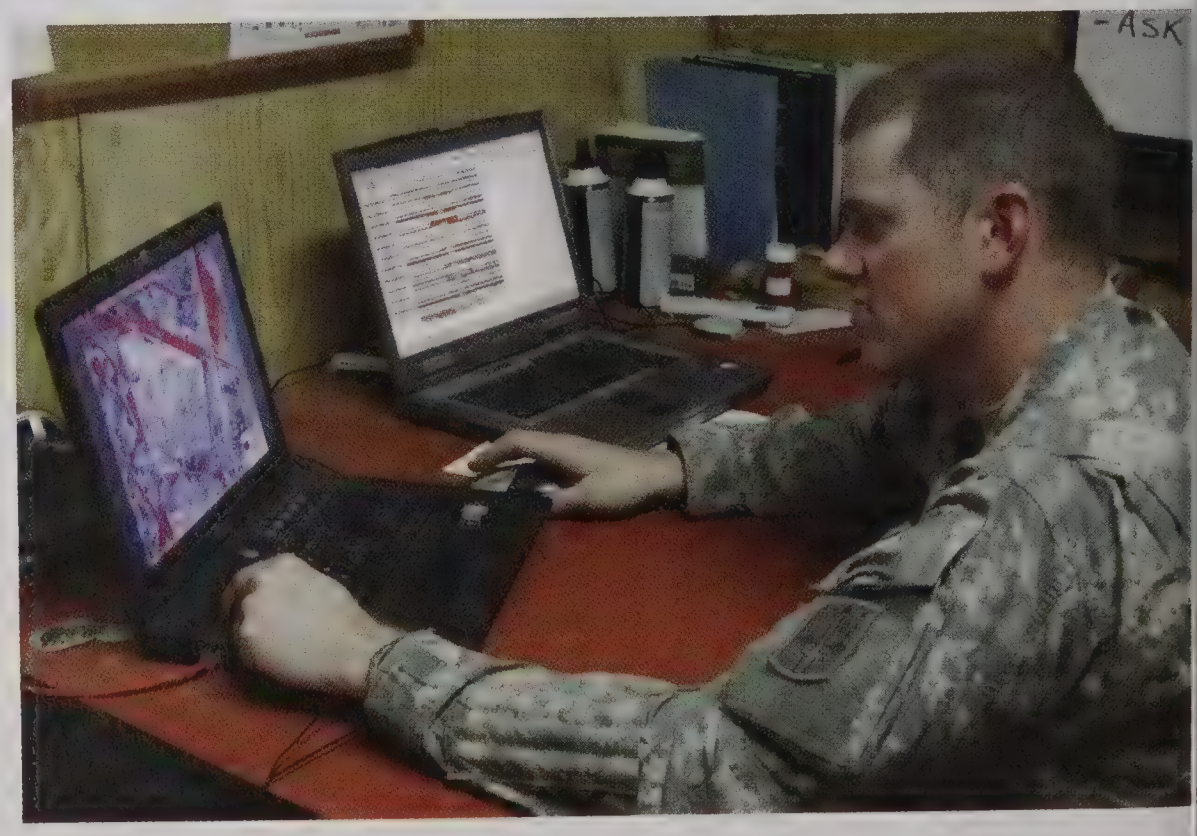
Joel (Aaron) Brown
E/2-2 CAV

I just returned from Iraq in November 2008. I was a company commander, and in my observation this platoon leader is absolutely correct. I would get in debates with my battalion commander about this subject. I would argue it was taking too much of the platoon leaders' time to do storyboards, patrol debriefs and TIGR net. His response was, "What else are the platoon leaders doing?"

I can tell you what they were supposed to be doing: They needed more time for troop-leading procedures, maintenance, training and property accountability. With the amount of patrols our troops were conducting on a daily basis, the leaders needed to be getting sleep and rest so they could make important decisions with well-rested and alert minds. A poor decision made by a tired platoon leader (PL) at Ranger School may mean he gets a "no go." A poor decision in combat may cost someone's life. Bottom line is that this comment about the platoon leader's time is absolutely true. We are taxing our platoon leaders with time-consuming reports that are redundant, and most of the time the reports don't get used for their intelligence value.

William Whaley
A/2-8 IN

In Iraq today, every patrol requires a CONOP, patrol brief patrol debrief, executive summary to BDE for any key leader engagement (KLE), and then a more detailed KLE summary for the S-2. An eight-hour patrol easily stretches to 12 hours for a leader. Figure two to three hours beforehand for PCC/PCIs, the patrol brief and mission prep. Then the patrol leader can expect about two to three hours of typing afterwards. I understand the need for each document and the purpose of each, but should a PL really being doing three to four hours of presentations/briefs each day? My fight is trying to weed through the information and see what



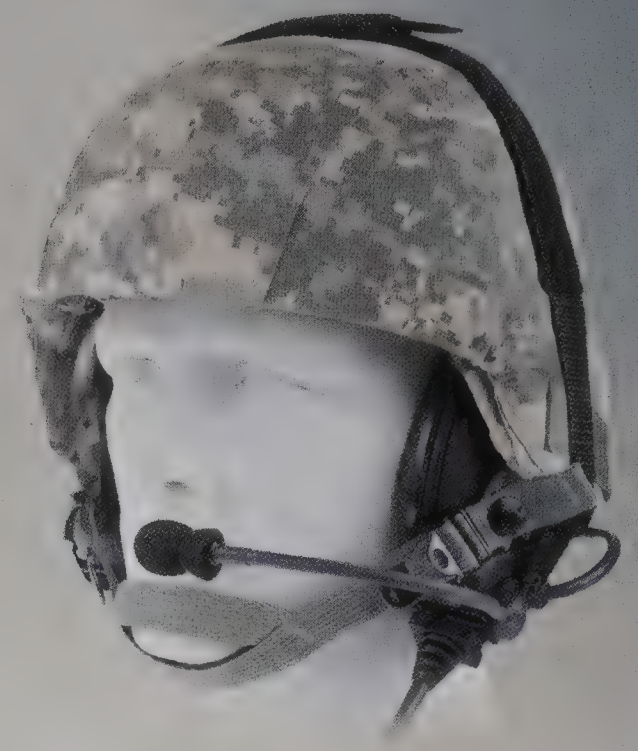
First Lt. Chris Wagnon works on a PowerPoint slide at his office on FOB Kalsu, south of Baghdad.

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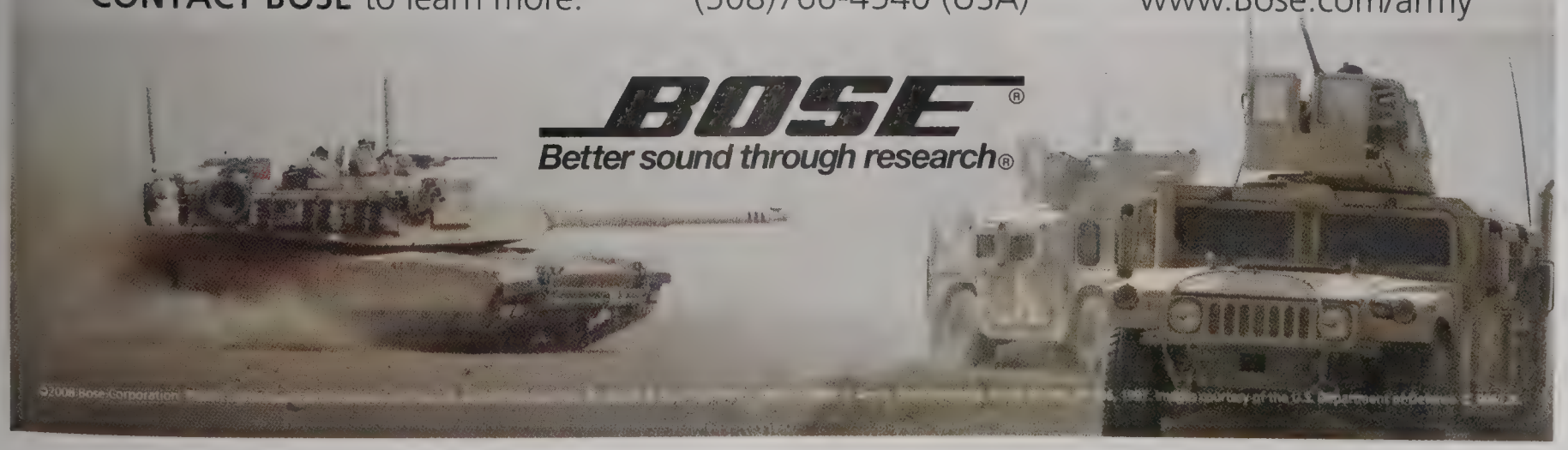
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Capt. Richard Ince (far left) stands with his company's leadership team at Patrol Base Courage in Baghdad.

can be taken off their hands. Currently my company has the mission of FOB defense, and even my tower guards are completing a debrief sheet during and after their shift. The information requirements from "higher" seem to grow every day. There are trackers for widgets and trackers for the bolts that go with the widgets. I am even guilty of telling my company ops guy, "Hey, I need a daily tracker for this." Just yesterday I realized that I said this, so I caught myself and told him, "Forget it. If I need the info, I will ask you when I need it or create it myself." I understand the need for information, but the information "requirements" have gotten out of hand.

Adam Greene
PL & XO, A/1-32 CAV

I absolutely agree with the statements, and I haven't been in the Middle East since September 2006, but it was already bad and getting worse when I was there. Initially, we briefed only if we saw or noticed anything unusual. The battle captain would ask us just a couple questions; he would write down the answers and process the information. By the end of the deployment, debriefs were so large that there was one computer dedicated to patrol debriefs and nothing else in the S-2 shop; the debriefs were so long and took so much time to complete that patrol leaders would go back to their bunks and fill them out there, and someone from the unit would bring them to-go plates from the mess hall so the patrol leaders wouldn't miss the two-hour deadline to submit the lengthy reports.

First Lt. Adam Greene visits with the leadership of an Iraqi police station in Qara Tapa, Iraq.

Richard Ince
A & HHC/2-5 CAV

I left Iraq last January after having served as an infantry commander for 12 months and an HHC commander for three months of my 15-month tour. I think that platoon leaders are spending too much time on their computers because more and more reporting requirements are being tacked on by the chain of command, and I'm talking division commander on down. Given this situation, the permanent fix is to make higher aware of the consequences of its policies with regard to information-reporting requirements. My other recommendation is to look at your company's and platoons' internal systems. Is there another individual (for instance, FSO, XO, competent company clerk) who can put the storyboard together after the PL compiles the information? Are the PL and CO training the PSGs and SLs in these tasks? The bottom line is that PLs should be spending more time with their Soldiers than with their computers. We are stunting their development if we continue to allow this to happen.

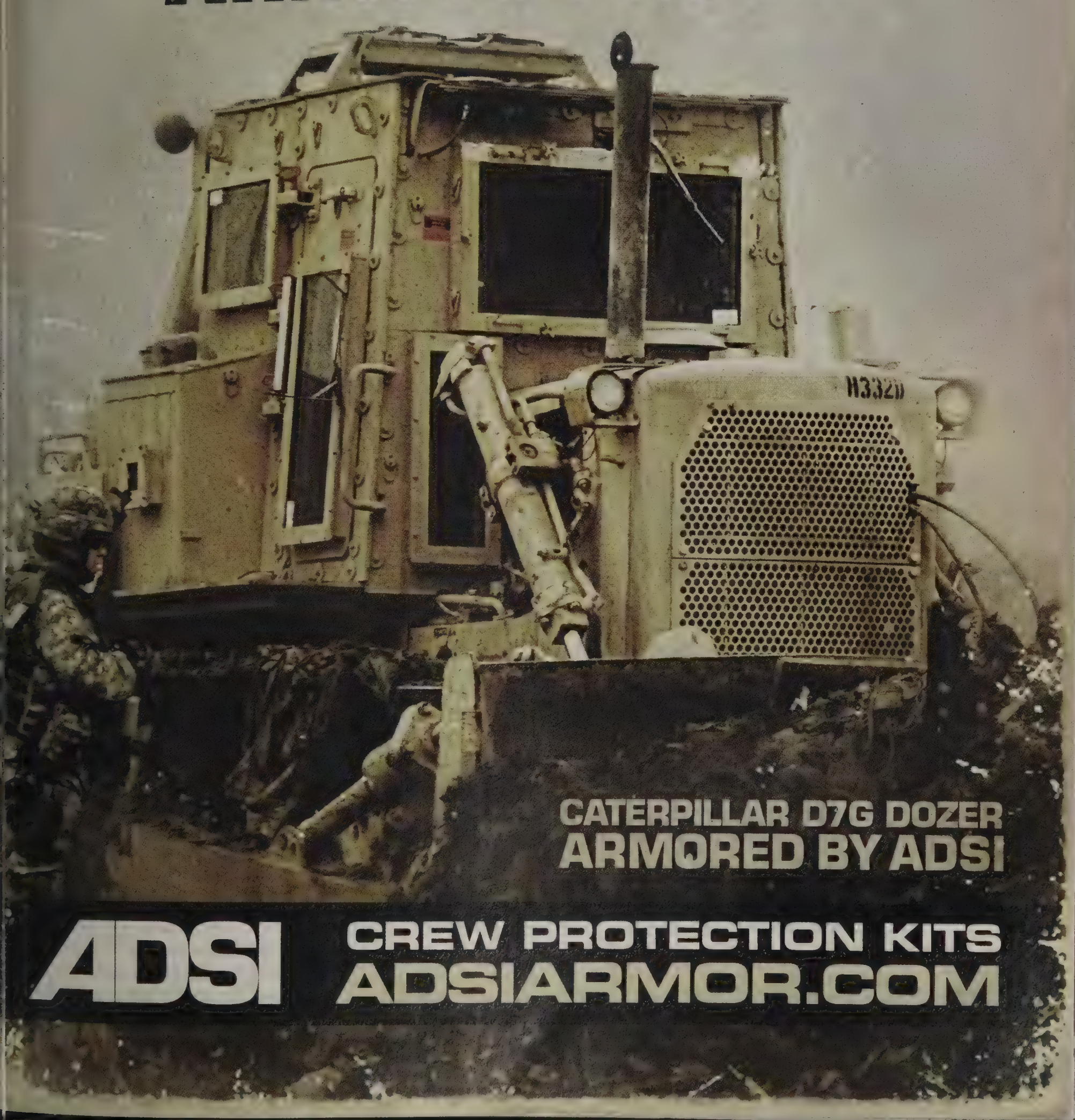
Craig Reuscher
C/426th BSB

Having been a platoon leader during OIF I, a battalion S-3 in OIF 2005–2006 and a company commander in OIF 2007–2008, it is my opinion that computers are simply tools that can be friction points or enablers. Keys to success with submitting CONOPS, post-OPS, etc., via PowerPoint are the following: *1*—Company-sized elements should employ an Ops-Intel cell that does the bulk of the report development and tracking, i.e., PowerPoint work. Generally this can be manned by two personnel such as the company XO and



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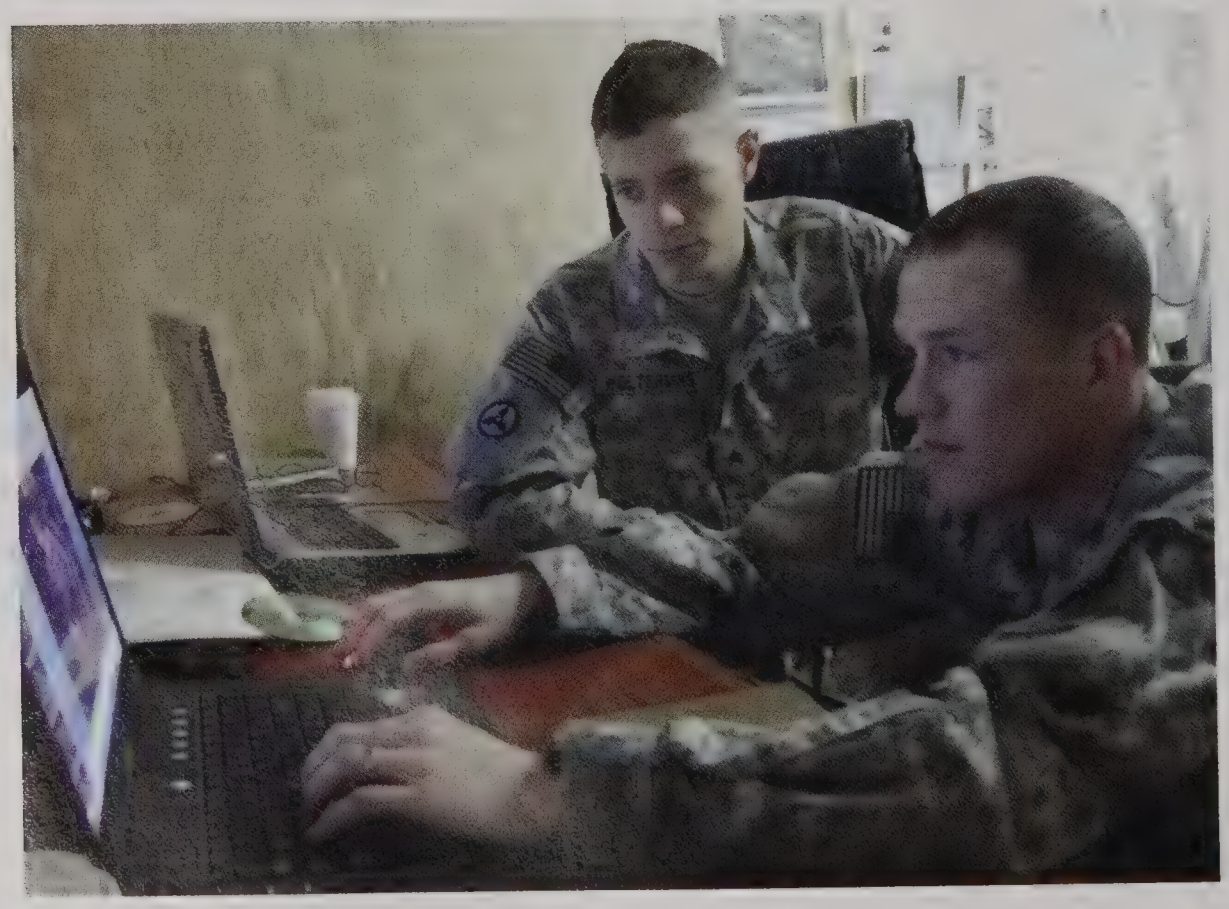
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Glossary

BDE—brigade.
BFT—blue force tracker.
BN—battalion.
CO—company or a company's commanding officer.
CONOP—concept of the operation (in other words, the plan).
FOB—forward operating base.
FRAGO—fragmentary order, an abbreviated operations order.
IPB—intelligence preparation of the battlefield.
MEDEVAC—medical evacuation by aircraft.
NCOER—noncommissioned officer evaluation report.
PCC/PCI—precombat checks/precombat inspections.
OPORD—operations order.
OPS—operations.
PPT—PowerPoint, the presentation software by Microsoft.
PSG—platoon sergeant.
S-2—intelligence shop or intelligence officer.
S-3—operations shop or operations officer.
SIPR/NIPR—the classified/unclassified Internet networks, respectively.
SL—squad leader or section leader.
Storyboard—a PowerPoint slide, usually with graphics and text, used to describe an event or activity.
SWEAT report—security, water, electricity, academics, trash.
TIGR—tactical ground reporting system, which stores and shares information collected on patrols.
TOC—tactical operations center.
UAV—unmanned aerial vehicle.

sharp E-4 or E-5. *2*—Have a template for the CONOP/post-OP, SWEAT report, etc., that is multifunctional and allows leaders to quickly input the five *W*s + 1 (who, what, when, where, why and effect, intended or actual). This template can include a section for a map and graphics, the five *W*s + 1, time line, key tasks, enablers (for example, aerial weapons teams, UAV support, mortars, scouts, medevac) and maybe a miscellaneous section. I have seen most brigades and battalions develop a template that becomes the standard format—no "making up stuff" for every mission. *3*—Platoon or patrol leaders should be concerned only with transmitting the five *W*s + 1 to the company Ops-Intel cell. The CO Ops-Intel guys then complete the report, validate the information with the PL and send it to higher. *4*—If you have to fill out more than a 3x5 index card for a patrol report (CONOP/post-OP), then it's too long. Oh … and this 3x5 card, in combination with a BFT or radio, is pretty handy when there is no power on your mission for multiple days.



First Lt. Leif Gilsdorf, the fire support officer of Company B, 2nd Battalion, 28th Infantry Regiment, and fire support NCO Sgt. Vincent Wolterman plot the collateral damage estimate for a 120 mm mortar fire mission on PowerPoint as part of the target nomination process.

David Callaway
B & HHB 1/180 FA

Good story! I experienced the same as a commande while serving in Baghdad and Ramadi from 2005-2006; however, my platoon leaders did not. I tried to get ou of my TOC as much as possible and managed to get ou probably four days a week. The rest of the time I was in fron of one of the two computers on my desk (SIPR, NIPR). spent 12 to 14 hours a day on those things. My platoon lead ers, on the other hand, were runnin daily squad or platoon missions an may have spent an hour or two eac day completing sworn statements, mis sion planning and NCOERs. Toward the end of our tour, they spent a lot c time on awards. The rest of the tim they were focused on the mission.

Paul Volke
A & HHC/4-31 IN

That platoon leader who says h spends most of his time on PowerPoi is missing the point of what he's real doing. He's not spending his time c PowerPoint—he's spending his time *r porting*. If he weren't doing it on Powe Point, he'd be doing it on a typewriter filling out forms in triplicate like our pr decessors have done since the Revol tionary War. The questions he needs ask himself are: How can I do this mo efficiently? What systems can be put place to streamline the process? Wh parts can be delegated to save ever



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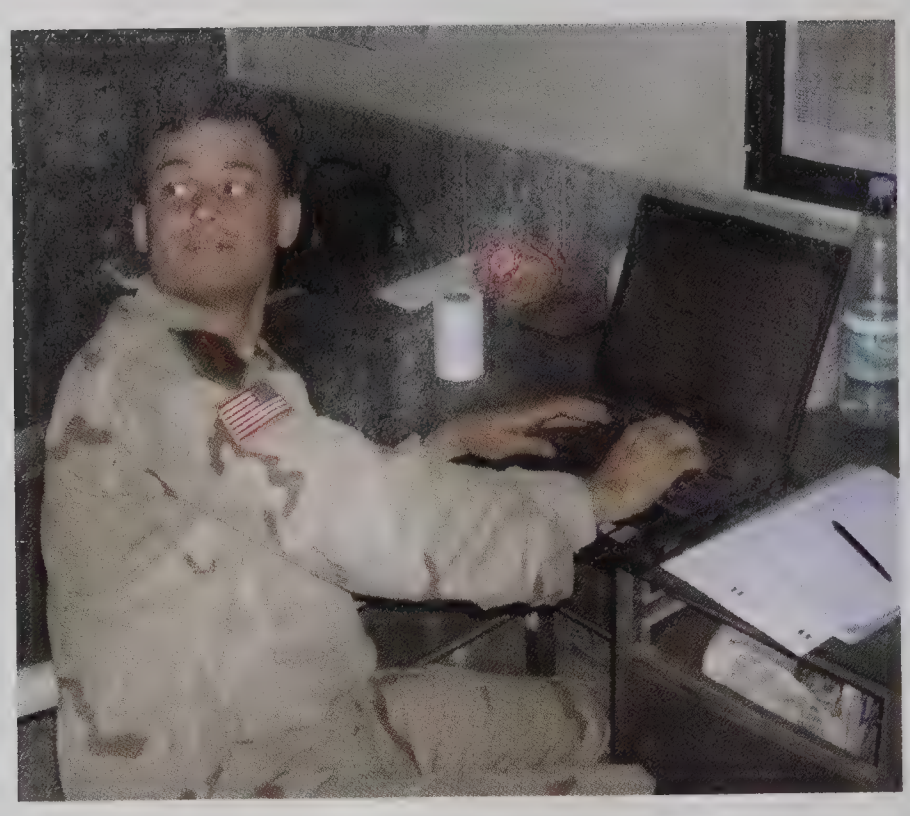
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First Lt. Mike Gunther works on an evaluation report for one of his noncommissioned officers at his unit's command post in Samarra. Five minutes after this photo was taken, 1st Lt. Gunther and his platoon were engaged in a firefight.

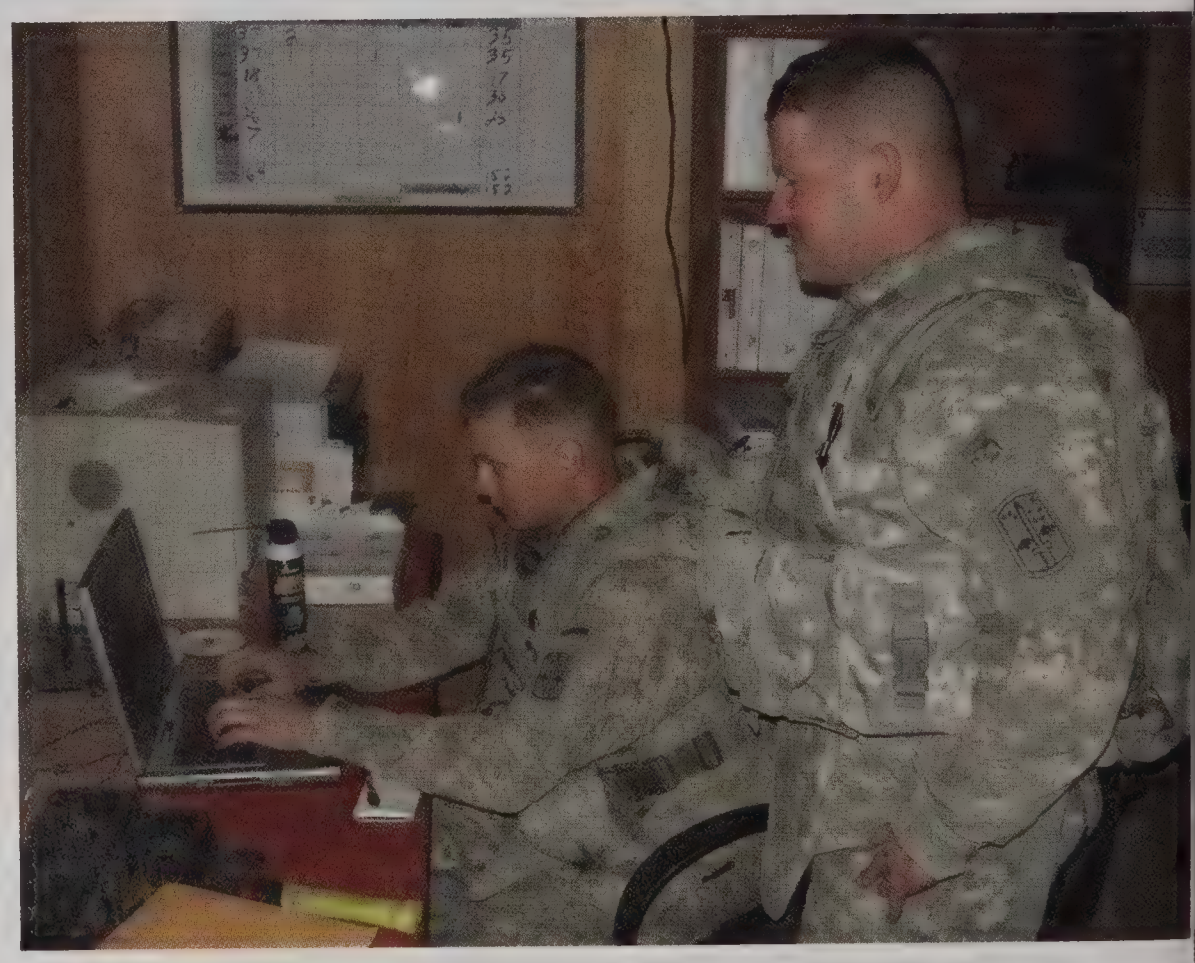
body some time? Many people complain about PowerPoint reports, but are they complaining about maps and intel products that come down on PowerPoint? As a commander in Iraq, I did FRAGOs on PowerPoint—one piece of paper that told my subordinates everything they needed to know. What are the benefits of those reports and storyboards that go up to higher? They help higher commanders make good decisions based on the information and assessments that leaders at lower levels pass up. Own your reports—don't let them own you. And ask yourself why higher wants the information. There is a reason.

Lou Nemec
571st Sapper CO

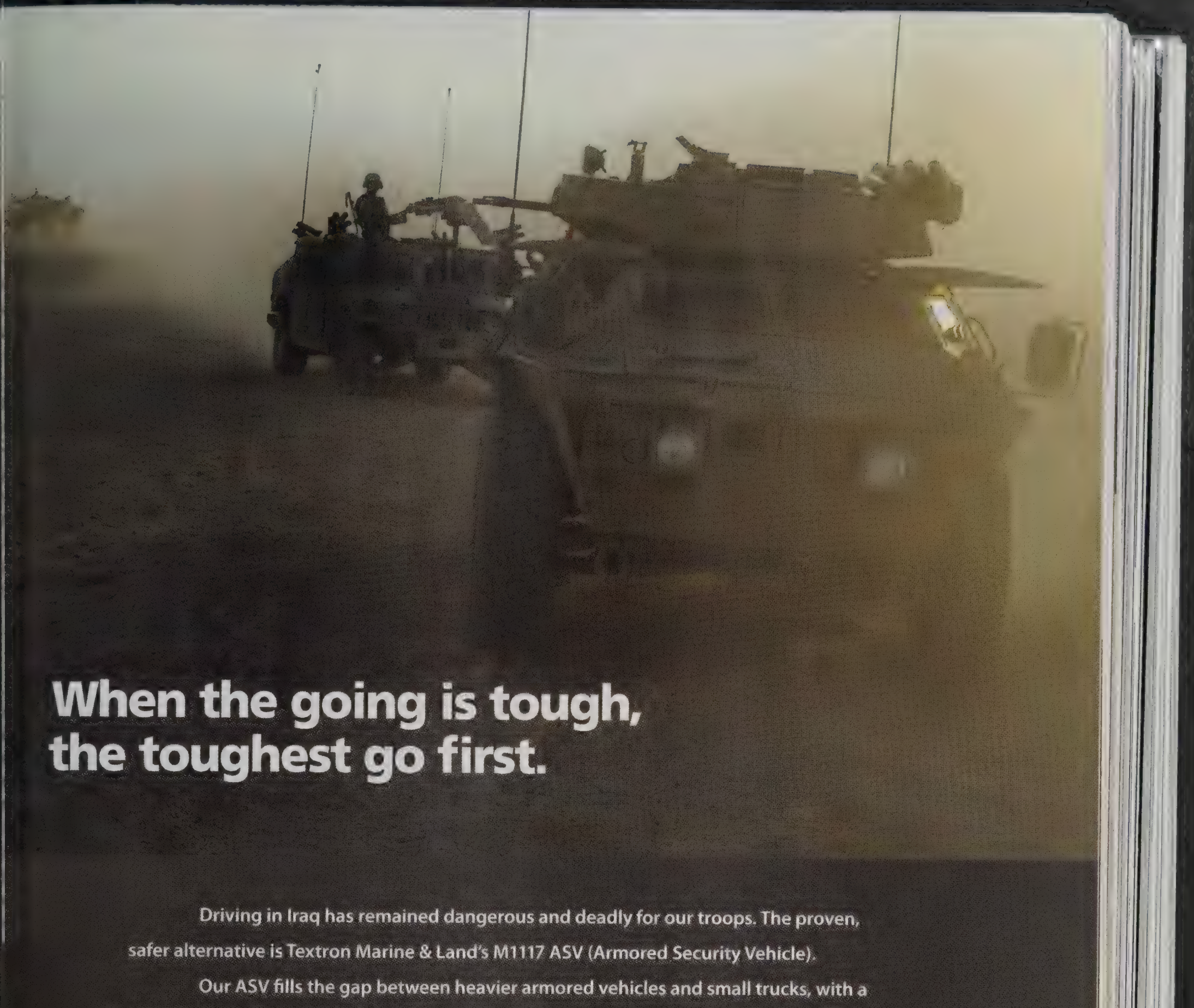
I expect my platoon leaders to do it all—lead the mission, help recover from it, ensure that their soldiers are conducting their priorities of work and then complete reports to include a storyboard, if required. Hasn't it always been this way? Didn't the platoon leader in Vietnam come back from a mission, set down his pack and head to the TOC to talk to the "old man" while his soldiers showered and bedded down? Although I wasn't there, I imagine they did. Computers haven't changed anything other than the amount and type of information that is relayed to higher headquarters. Some of these issues could be fixed by having the "TOC guys" start or complete products for the platoon leader. I will say that unless you are very blessed in the personnel department, what you would make up for in efficiency, you would more than lose in quality. Only the platoon leader or platoon sergeant knows the true story of what happened out there, and most TOC guys aren't going to have as much education and training as a platoon leader or platoon sergeant. Finally, a good commander should press his platoon leaders to complete requirements that are important, yet he should also shield them from requirements that do not serve a function. When a platoon leader comes in tired from a mission and complains about a storyboard involving intelligence that may help the S-2 make a recommendation to the battalion commander, it's the company commander's job to ensure that he completes it. But when the requirement is not time-sensitive or important except to an obscure staff officer/NCO, it's the company commander's job to assess his leader and deflect the pressure until that leader is rested.

Joe Pruitt
E/4-3 AHB

Having just returned from Baghdad as a BDE battle captain, I can tell you that all of our storyboards were created at the BN level or higher. That said, everyone—down to the people involved in whatever it is that we were reporting—was involved in creating reports of some kind and pushing them higher. We use PowerPoint now because it is easier, generally takes less time and relays a greater depth of information than an "old school" radio report. If reporting to higher is taking too much time away from the LT in question, maybe he needs to take a class or learn how to manage his time better.



Platoon leader 1st Lt. Joshua Cobb and platoon sergeant SFC Gus Reiley develop a patrol debrief after returning from a mission.



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Capt. Robert Richardson (center), 1st Lt. Will Sullivan (left) and 1st Lt. Casey Baker (right) prepare for a night air-assault mission to capture a high-value individual in Taji, Iraq.

The requirement to report to higher has always been around and isn't going away any time soon.

Jason Wayne
A/1-503 IN (ABN)

Interesting conversation. I've felt the pain of building PowerPoint slides numerous times as a PL, XO and CO. But the relevant question is, "*Should* your PLs be PowerPoint savvy?" The answer is, "Absolutely!" It comes down to communication. This is a fundamental leader issue, and PowerPoint is the current medium of choice for communication. Communicating the right information to higher—"painting the picture"—has won and lost wars since the beginning of time. Now, is the "water plant 30-day follow-up slide" going to win or lose the war? Probably not. Is it even necessary? Maybe yes, maybe no. Will it provide you a tool to evaluate whether all the money you are dumping into the project is actually worth a damn? Absolutely yes, if done correctly!

My PLs build only three things for me on PowerPoint:

■ CONOP—No more than three to four slides including risk assessment; it also doubles as their PLT OPORD for the mission, which they have to do anyway. This gets reviewed by me and then sent to battalion for their use and abuse.

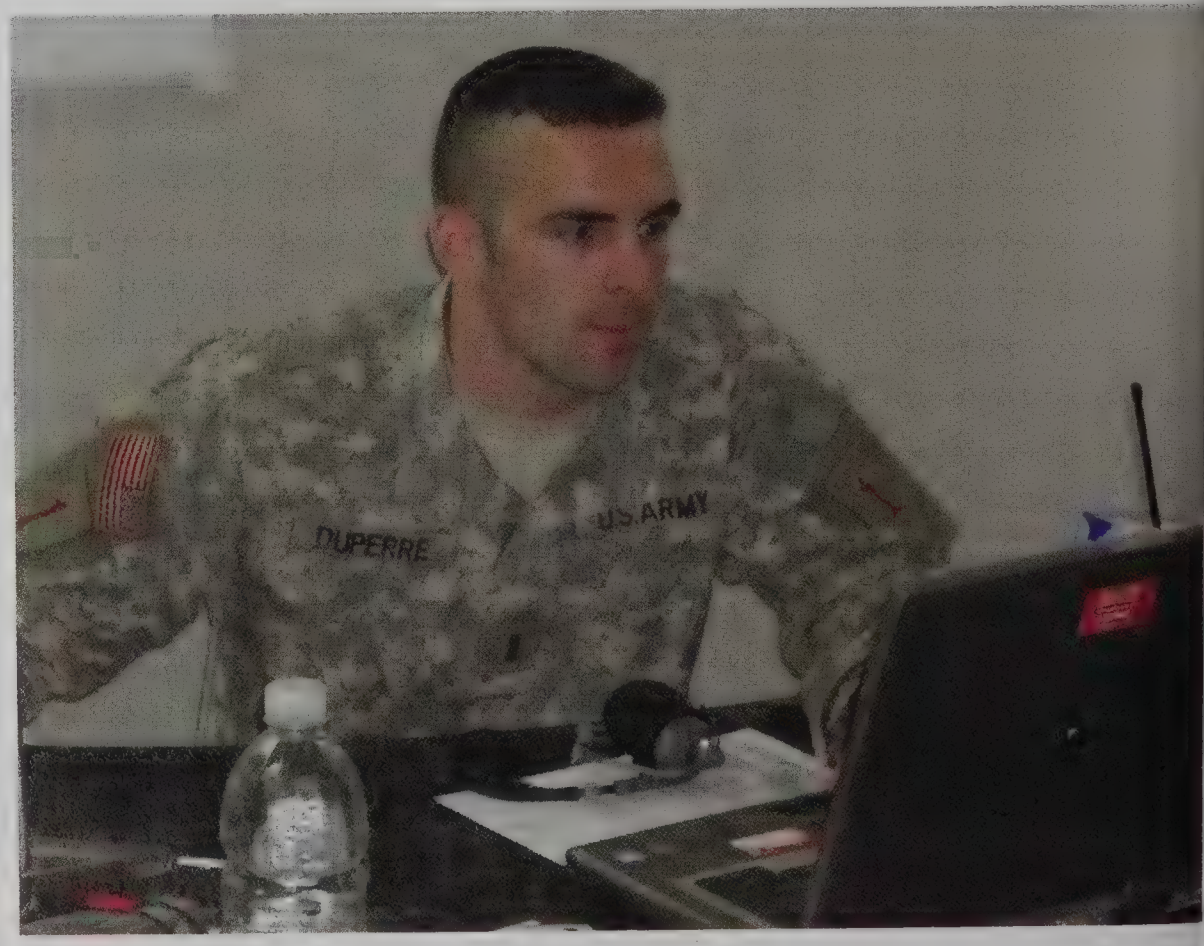
■ Patrol and Intel Debrief—Uses a shell into which they fill the five *W*s, key points, key intel developed and any pictures taken during the patrol. This is *my* tool to assist with current ops IPB and gets fed directly to my battalion S-2.

■ Project Assessment—Simple one-to-two page write-up of the project's current status with pictures attached. Key points focus on whether the project is meeting its desired intent and what additional resources are needed.

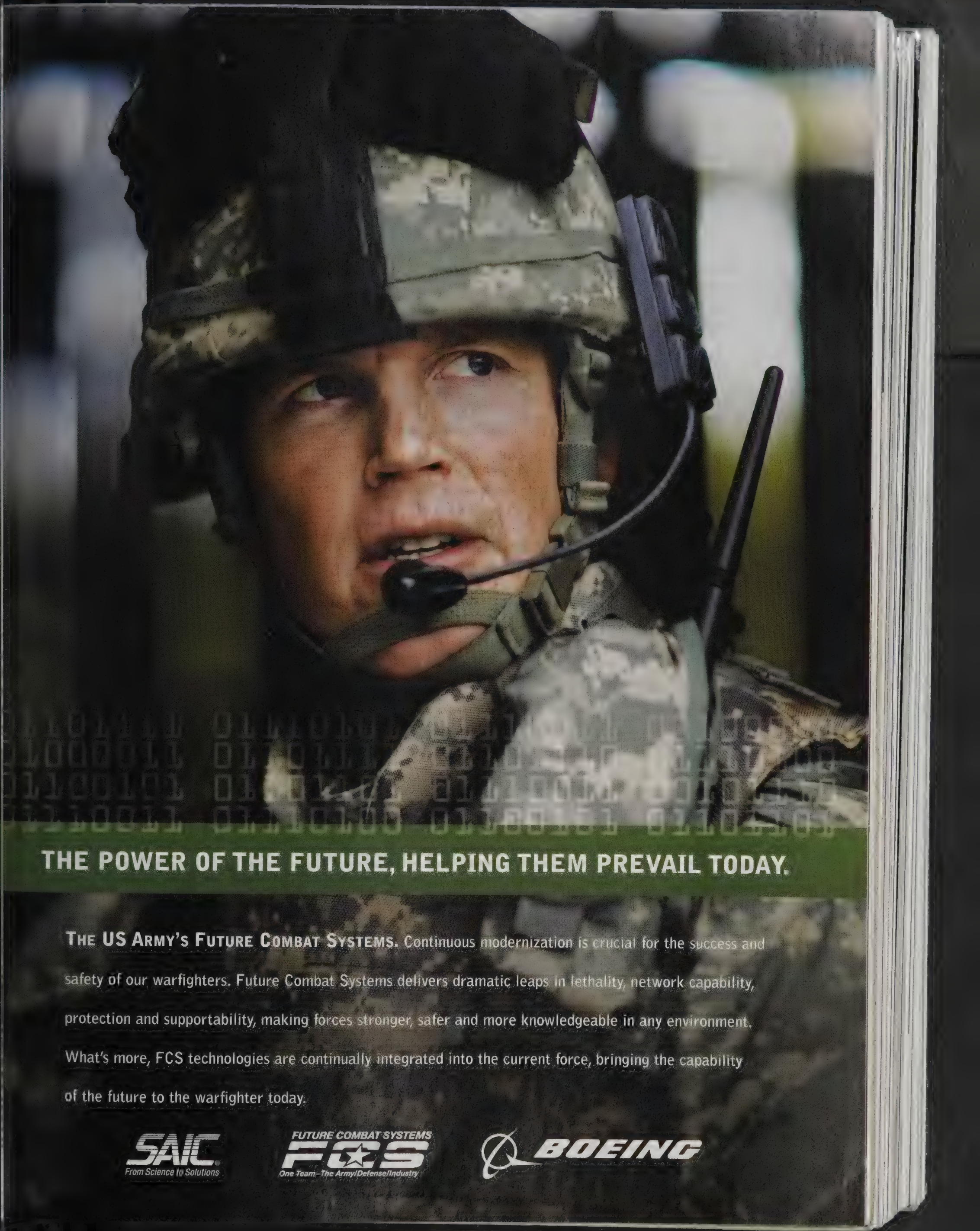
As commanders, we need to train our platoon leaders to communicate using PPT. I can crank out a PLT or CO CONOP in about an hour. The first few times, it took my PLs several all-nighters to get theirs correct. Now they can do it in about the same amount of time. Your PLs need to practice this stuff or they are going to be just like the PL in the original post—spending too much time on PowerPoint.

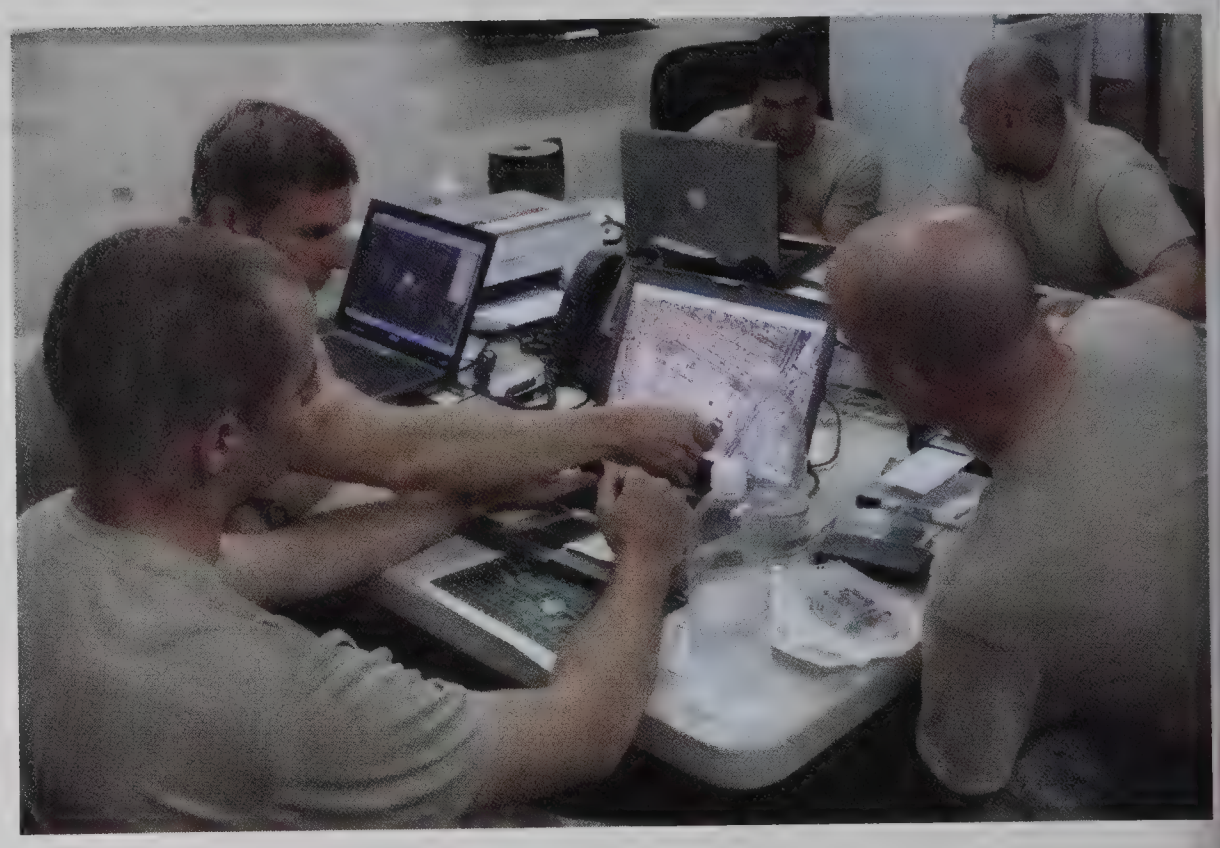
Robert Richardson
A/1-7 CAV

I've got one word for that PL—delegation. When my PLs started spending too much time doing admin stuff, I gently reminded them that they had a stable of NCOs and EMs who were more than capable of performing those types of tasks. After about three months in theater, every NCO and E-4 in my platoons (to include the HQs) was capable of preparing and submitting storyboards, CONOPS, TIGR net



First Lt. Steve DuPerre, a platoon leader in Company A, 1st Battalion, 7th Field Artillery Regiment, works on computers in his battery's command post.


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A company commander, first sergeant and three lieutenants plan operations from their company outpost in Baghdad.

reports, and any other admin or computer-based thing that was needed. Once the skill set is developed, the load can be spread around among the platoon. All the PL should be doing is reviewing things prior to submission to higher, which allows him time to lead more effectively.

Wynn Nugent
1022nd EN CO

Computers: Good thing or bad thing? My answer is neither—computers are a tool. PowerPoint is just a tool. It can be effective or counterproductive depending on how it is utilized. All of the other posts have excellent points as to what seems to be driving the train. Bottom line—it is the company commander's job to shelter his or her PLs from this stuff and to give them the room they need to lead troops. I guarantee you that this PL is doing this because he is pushed by his commander. Of course, I am sure that the commander is getting pressure from a BN staff, who is getting pressured from BDE, who is getting … well, you get the picture. Somewhere someone has to say, "The buck stops here!" I have to believe that the higher commanders are not aware of the time being taken away from the troops. This is one of those "don't tell me about the birthing pains, just show me the baby" things. Even your best commanders are going to rock along as long as suspenses are met and there doesn't seem to be an issue. I have to believe that even if the info gathering was a priority and it was taking the PL's time from his troops, a good commander would find additional resources to assist this PL in getting back into the fight with his troops. Now, as company commanders, we need to have our house in order before we go to the old man. Make sure that your PL is not having time-management issues and that he doesn't just need a quick down-and-dirty on PowerPoint or something like that.

Anthony Freda
603rd TC

I just finished a tour in Iraq, down south. I deployed as a separate company and served under two different battalions. One battalion buried us with PowerPoint, micromanaged us and forbade my PLs from going out with their Soldiers. My officers were administrators, not leaders, which fostered contempt among the Soldiers. A few months into the deployment, another battalion took over and changed all this. Then my PLs were able to be out there with their Soldiers, and you could sense a change. As far as the briefs went, they were cut down drastically. I required my PLs to diagram events and submit a time line to me, and I would take time out of my schedule to do any PPT briefs that needed to be done so my platoon leaders could maximize their troop time. Between myself, my XO and my first sergeant, we would put together a brief, let the PL and PSG review it, and then send it higher. Commanders, shoulder that load from your PLs and allow them the time to spend with their Soldiers. I guarantee you results, and you, as a commander, will have a better understanding of what's going on out there even if you can't always be there.

The Company Command Team would like to thank Sam Nuxoll for being the catalyst for this discussion.

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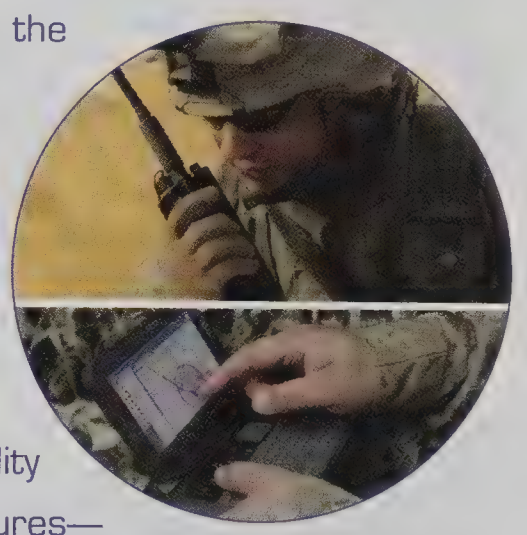


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Tactical and Urban Unattended Ground Sensors

By Scott R. Gourley

In terms of current and future operations, service planners have identified a number of potential capability gaps, including protecting the force in operations, collecting and disseminating timely information, conducting joint urban operations and delivering responsive, networked, indirect precision fires. As part of the Future Combat Systems (FCS) reconnaissance and surveillance architecture, tactical and urban unattended ground sensors (T-UGS and U-UGS) are designed to bridge these gaps, providing warfighters with early warning and greatly enhanced situational awareness operational capabilities against a range of evolving threats.

Emerging under the capstone operational requirements document for FCS, T-UGS and U-UGS consist of modular groups of sensors utilizing customizable sensing technologies—such as seismic, acoustic, imaging and other advanced sensing capabilities—designed to provide commanders with a continuous, near-real-time source of information on enemy actions and movements in selected areas, allowing those commanders to gather information on those areas while reducing the commitment of soldiers and/or manned/unmanned platforms.

Prototype versions of the sensors are already fielded to the Army Evaluation Task Force (AETF) at Fort Bliss, Texas, where warfighters are exploring optimized applications for the sensors in an expanding variety of tactical scenarios.

According to Col. Michael E. Williamson, project manager, FCS BCT Network Systems Integration, the U-UGS and T-UGS "give commanders and soldiers better situational awareness without requiring soldiers to be on the ground observing potential hot spots. These capabilities provide the commander with more flexibility and offer better force protection."



U.S. Army



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Top, an urban unattended ground sensor (U-UGS) provides visual surveillance of urban choke points such as corridors, stairwells, culverts and tunnels. Above, tactical unattended ground sensors (T-UGS) monitor vehicle traffic, foot traffic and radiological/nuclear agents.

Col. Williamson noted that the tactical version, T-UGS, "provides a recoverable, persistent sensing capability assisting the commander in attaining situational awareness of the battlespace. The system is tailored to mission requirements and is hand-emplaced by a soldier. T-UGS provides the IBCT [Infantry brigade combat team] with a sensing asset capable of monitoring vehicle traffic, foot traffic and radiological/nuclear agents. T-UGS are able to fuse data internally between multiple sensor nodes to confirm the detection, classification and location of BSOs [battlespace objectives]. This is most commonly used as a surveillance tool on named areas of interest, on mounted and dismounted avenues of approach to aid the tactical operation."

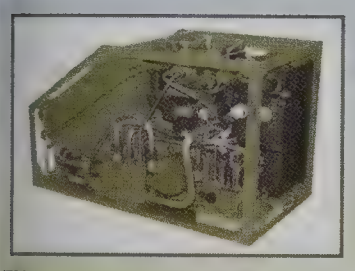
Conversely, the IBCT will employ the U-UGS "primarily in urban and complex terrain to help isolate and provide unmanned security during close combat. U-UGS provides the IBCT with enhanced situational awareness and force protection in urban environments. The U-UGS provides remote monitoring and warning capability for the current force small unit (section) in caves and in urban environments such as tunnels, sewers, structures and inside buildings."

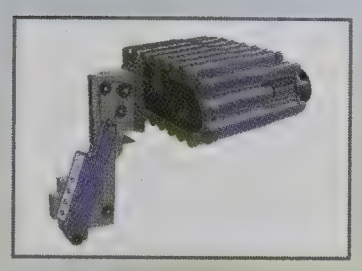
The sensors "self-organize into a networked sensor array (sensor web) by utilizing the gateway for transmission of information," Col. Williamson explained. "They are also self-healing, able to quickly bypass a neutralized gateway and locate a functional one within the sensor web."

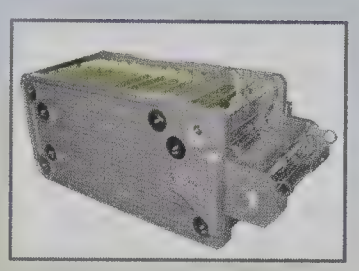
"Each UGS array is part of a coherent collection plan to meet the commander's critical information requirements and gain information dominance within the BCT area of operations. The BCT employs UGS in all terrain sets to help develop the situation and refine information during contact, facilitate the tactical assault or enable transition to the next engagement," he said.

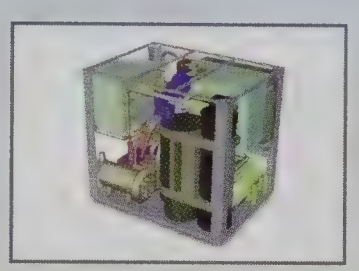
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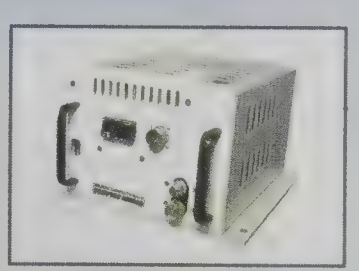
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An Army Evaluation Task Force soldier at Fort Bliss, Texas, conducts training with a T-UGS. Urban and tactical unattended ground sensors, part of the Future Combat Systems' equipment, are expected to field to infantry soldiers by 2011.

T-UGS and U-UGS were selected for the FCS Spin Out 1 package to address some of the unique needs identified by the many operational need statements received from theater. Spin Out 1 systems feature matured technologies that will continue to evolve and be integrated into the current force, ultimately achieving the core FCS capabilities.

Col. Williamson noted that the UGS prototypes were delivered to Fort Bliss for evaluation during the FCS preliminary limited user test in fiscal year (FY) 2008. "Evaluation results led to recommendations to change the shape of the UGS form factor," he said. "In addition, JTRS [Joint tactical radio system] radio hardware is now available, so that will be added as part of the redesign. Deliveries of the redesigned UGS to Fort Bliss will be made in FY 2009 to support spin out TFT [technical field test]/FDTE [force development test and experimentation] and limited user test activities."

"There are a lot of technicians, and when we go out to test this equipment, they're out there with us," said Sgt. Cresswell Codling, a scout platoon squad leader at the AETF. "They see firsthand flaws and problems. And if they don't see it, we'll tell them."

Between each of those phases of testing, he explained, "the engineers will take the equipment, upgrade it, try modifications, bring it back to us, tell us what they did to it, and we'll see if it works better. We're taking steps forward with it."

"It works better consistently every time it comes out," said Sgt. Bruce Nemeth, another squad leader in the AETF scout platoon. "We have faith in the modifications" to the system.

According to Col. Williamson, industry participation to date has included Boeing, as FCS lead systems integrator; Textron Defense Systems, as UGS supplier; and Honeywell, as U-UGS subcontractor.

Looking toward the future, Col. Williamson said that the UGS will undergo limited user testing in mid-2009 and, pending a subsequent "Milestone C" decision, will enter low-rate initial production for fielding to IBCTs starting in 2011, with all IBCTs fielded by 2025. According to Paul Mehney, associate director of public communications, U.S. Army Office of the Program Manager FCS BCT, the UGS will continue refinement and also field with the core FCS program in 2015.

Asked to comment on the significance of UGS for the warfighter, Col. Williamson said: "UGS will enhance the commander's decision process and situational awareness.

"Sensor data will be incorporated into operations planning and execution. The UGS is capable of assisting with target acquisition and tracking through internal signature processing. The sensor web parses, processes and correlates data into standard formats for digital transmission. The information is accessible to vehicles equipped with Spin Out 1 network integration kits within the transmission range of a gateway and indirectly available to all other FBCB2 [Force XXI Battle Command, Brigade and Below]-equipped platforms. Information transmitted to the FBCB2 is accessible to echelons above the BCT via networked systems. UGS variants have an inherent Level 0 fusion capability. UGS are a component of the layered sensor approach to leverage all sources of information, from internal and external sources, to build high-fidelity SA. UGS fields will provide near-real-time information relating to enemy force movement, massing of forces and mass displacement of civilians. UGS can also provide force protection information in advance during entry operations when emplacement in these locations is feasible. The employment of UGS during operations in urban environments will enhance soldier protection."

Veterans of two tours "downrange" each, Sgt. Codling and Sgt. Nemeth cited their own version of UGS benefits, along with something of a warfighter reality check.

"It will reduce the number of troops required on observation posts (OPs)," Sgt. Codling said. "And that will give us more hands and more shooters in urban environments."

"On a screen line or an OP, you're going to be dependent on your sensor field that's pushed out 600–800 meters in front of you," Sgt. Nemeth added. "But on top of that, you still have something to fall back on. You still have your optics and everything [else] that you would normally have on an OP, so you don't get entirely dependent on this technology."

He concluded: "I don't think there's any replacement for a soldier's instinct and what we bring to the field." ★

CORRECTION

In the January "Soldier Armed," the acronym VUIT-2 stands for video from unmanned aerial systems for interoperability teaming-level 2. Also, MTADS stands for modernized target acquisition designation sight.

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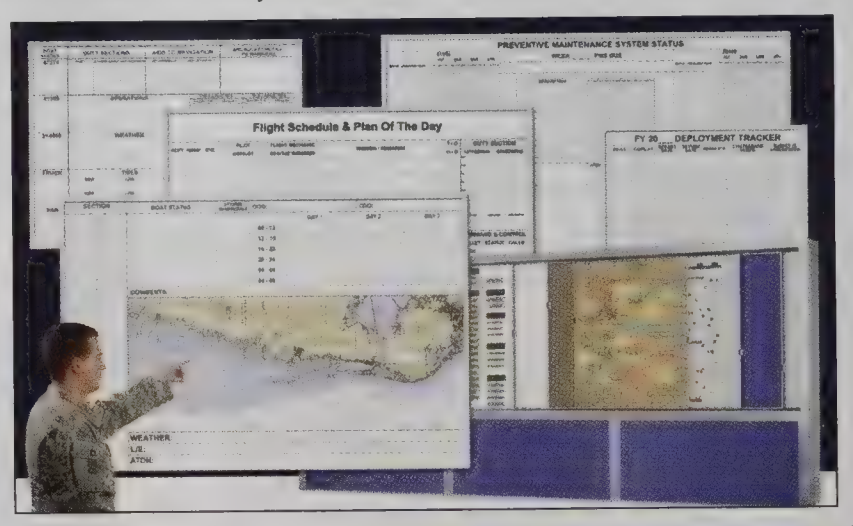
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Corporate Structure—President: Maj. Gen. Robert W. Mixon Jr., U.S. Army retired. Headquarters: 2031 O'Neill Road, Macedon, NY 14502. Telephone: 800-624-4154. Web site: www.magnatag.com.

Everywhere people and organizations need to share information 24/7, Magnatag® Visible Systems has been providing applications to help since 1967. A veteran-owned manufacturer and direct marketer of dry-erase printed magnetic steel whiteboard kits and accessories, Magnatag® has provided thousands of military-specific whiteboard kits, maps, charts and accessories to all branches of the U.S. armed services. The company's interactive information display systems—many of them patented—are currently in use throughout factories, headquarters, training sites, maintenance facilities and high-traffic areas on military installations around the world.



Korean War-era U.S. Air Force veteran Wallace (Wally) Krapf established the company in Macedon, N.Y., almost 42 years ago. Today Magnatag® continues to be a family-owned company whose products are proudly made in the United States. Krapf has teamed up with his son Christian and Maj. Gen. Robert W. Mixon Jr., U.S. Army retired, to create an organization with entrepreneurial spirit and an aggressive growth strategy. Together they are leading a company of more than 50 dedicated professionals who take great pride in providing the military with high-quality visible systems built for a lifetime of daily use.

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Reviews

Excellent Analysis of Lee's Retreat from Gettysburg

One Continuous Fight: The Retreat from Gettysburg and the Pursuit of Lee's Army of Northern Virginia, July 4–14, 1863. *Eric J. Wittenberg, J. David Petruzzi and Michael F. Nugent. Savas Beatie. 528 pages; maps; black-and-white photographs; index; $34.95.*

By Col. Cole C. Kingseed
U.S. Army retired

The three-day Battle of Gettysburg left approximately 51,000 casualties and is the largest battle ever fought on the North American continent.

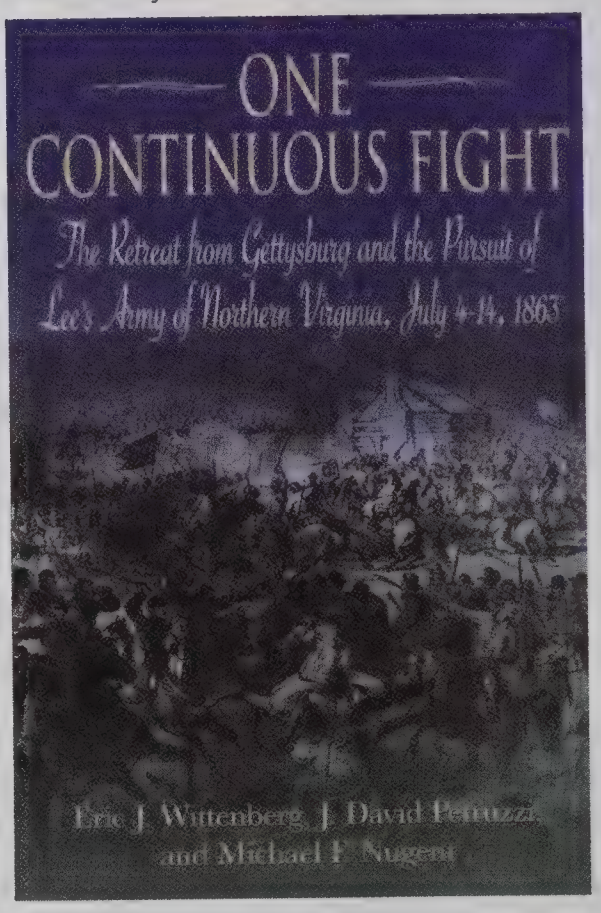
Despite the many books written on this climactic engagement, not a single volume focuses exclusively on the movement of both armies to and across the Potomac River. Authors Eric J. Wittenberg, J. David Petruzzi and Michael F. Nugent correct this imbalance in *One Continuous Fight: The Retreat from Gettysburg and the Pursuit of Lee's Army of Northern Virginia, July 4–14, 1863.*

Exactly what Union Maj. Gen. George Meade did to try to intercept the fleeing Confederates and how Confederate Gen. Robert E. Lee managed to escape to Virginia after his defeat is the subject of this volume.

At the heart of the drama is Lee's enigmatic cavalry commander, Maj. Gen. J.E.B. (Jeb) Stuart, who bore the primary responsibility for protecting the retreating Confederate wagon train of wounded and supplies that stretched more than 17 miles. Wittenberg and Petruzzi chronicled Stuart's performance in the opening stages of the Gettysburg campaign in *Plenty of Blame to Go Around: Jeb Stuart's Controversial Ride to Gettysburg.* Stuart failed Lee in conducting a raid deep into the enemy territory.

One Continuous Fight serves as an apologia for Stuart, who "more than redeemed his flagging reputation" during the retreat.

In compiling their study, Wittenburg, Petruzzi and Nugent draw upon hundreds of personal papers, diaries and newspaper accounts that detail the movement of both armies as Lee conducted an orderly and deliberate retreat across the Potomac. Over the course of 10 days, the armies fought 22 engagements, skirmishes and battles. Most of the 6,000 casualties were incurred within the cavalry corps of each army. Here Wittenberg and his



colleagues give higher marks to the Confederate horsemen than they do to their federal counterparts. According to the authors, the "opportunity to interdict Lee's route of retreat ... was frittered away" when Union cavalry commander Maj. Gen. Alfred Pleasonton dispersed his cavalry the day following Confederate Maj. Gen. George Pickett's ill-fated charge. Without central direction of the tactical force best suited for aggressive pursuit, many opportunities were missed by the Union high command.

Could Meade have done more to destroy the Confederate army? President Abraham Lincoln thought so, and he directed Meade to finish what he had "so gloriously prosecuted" at Gettysburg. The authors, however, think differently and conclude that "the reality on the ground and in the ranks indicate that both army commanders made correct decisions during the withdrawal." Still, there can be little doubt that Meade missed a strategic opportunity to inflict a mortal blow against Lee's army, both on the field of Gettysburg and in the retreat from the battlefield.

Although grossly failed by Pleasonton, Meade must share a portion of the blame for Lee's escape. Reluctant to order his army to immediately attack Lee's Army of Northern Virginia at Gettysburg, Meade only committed two of eight corps into action during the pursuit of Lee's defeated force. Meade also failed to hold the critical town of Williamsport, Md., where Lee constructed pontoon bridges across the Potomac River.

In addition, Union forces on the southern bank of the Potomac could have secured the far bank of the river, thus preventing Lee's escape.

While *One Continuous Fight* offers numerous reasons why Meade did not capitalize on the opportunity to destroy Lee's army, not the least of which was the detachment of several brigades to quell New York City's draft riots in mid-July 1863, the authors view Lee's retreat strictly through the tactical prism of war. Not surprisingly, the authors concentrate on the daily engagements between Stuart's cavalry and those federal forces dispatched to intercept the fleeing Confederates. By concentrating solely on the series of individual battles during the movement toward the Potomac River, they neglect the operational and strategic possibilities that Meade squandered during the 10 days following the battle at Gettysburg. Had Meade not let these opportunities slip through his fingers, the course of the war would undeniably have been altered.

This observation notwithstanding, Wittenberg, Petruzzi and Nugent have provided an excellent analysis of the forgotten phase of the Gettysburg campaign. Three appendices, one outlining the complete order of battle for Gettysburg, and a series of original maps greatly enhance the text. As with *Plenty of Blame to Go Around*, the authors include a driving tour, complete with GPS coordinates, to follow both Lee's retreat from Gettysburg and the route of the wagon train of wounded. Well researched and admirably written, *One Continuous Fight* is a welcome addition to our understanding of the Civil War's most pivotal battle.

COL. COLE C. KINGSEED, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

Varied Fare

The Complete Idiot's Guide to Your Military and Veterans Benefits. *Lawrence J. Webber and Katrina L. Webber. Alpha Books. 432 pages; index; $18.95.* **The Complete Idiot's Guide to Life as a Military Spouse.** *Lissa McGrath. Alpha Books. 240 pages; index; $12.95.*

A wealth of benefits exists to make life easier for U.S. armed forces servicemembers, but navigating the maze of paperwork and procedures to secure them can be tricky. Two new books in the *Complete Idiot's Guide* series endeavor to clarify the many practical advantages of serving in the military, laying out in clear, organized chapters what is available, how to make full use of benefits and whom to contact to find out more.

Cowritten by 22-year active duty and Reserve veteran Lawrence Webber, *The Complete Idiot's Guide to Your Military and Veterans Benefits* covers cash incentives, noncash benefits, money for school, Guard and Reserve entitlements and aid available after leaving the service. The first section explains in detail how to determine soldiers' service categories so that they know which benefits they are eligible for. Tips highlighted in boxes throughout the volume call the reader's attention to special benefits, possible missteps or snags, and sources of further information.

For military spouses, discovering what entitlements exist and how to participate can be even more confusing than for servicemembers themselves. In *The Complete Idiot's Guide to Life as a Military Spouse*, author Lissa McGrath—"married to the military" herself—provides detailed information that military spouses and spouses-to-be will find essential. The book is written from a female perspective, but as McGrath explains in the introduction, issues that male spouses face are addressed, and all the benefits explained apply to them as well. While many aspects of pre-, during and



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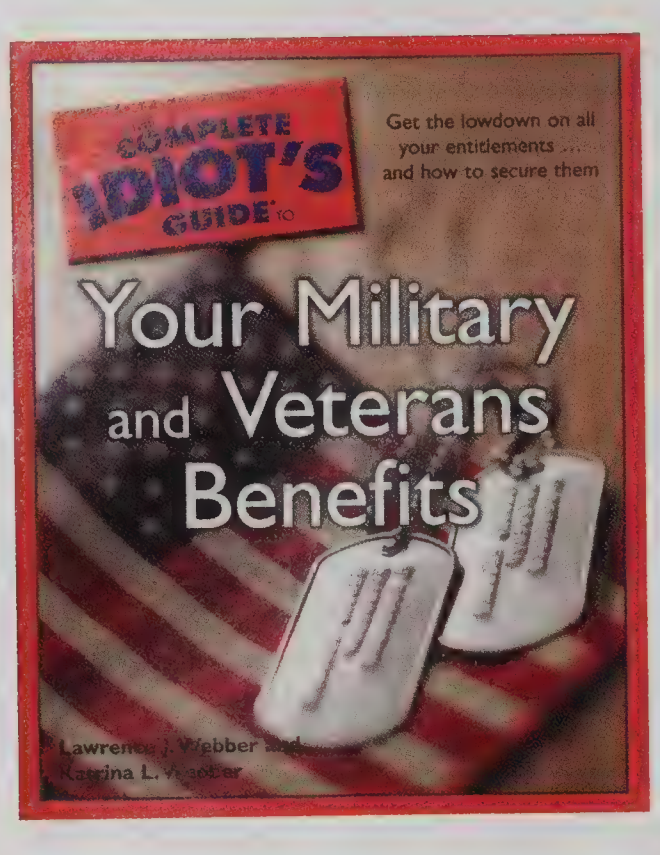


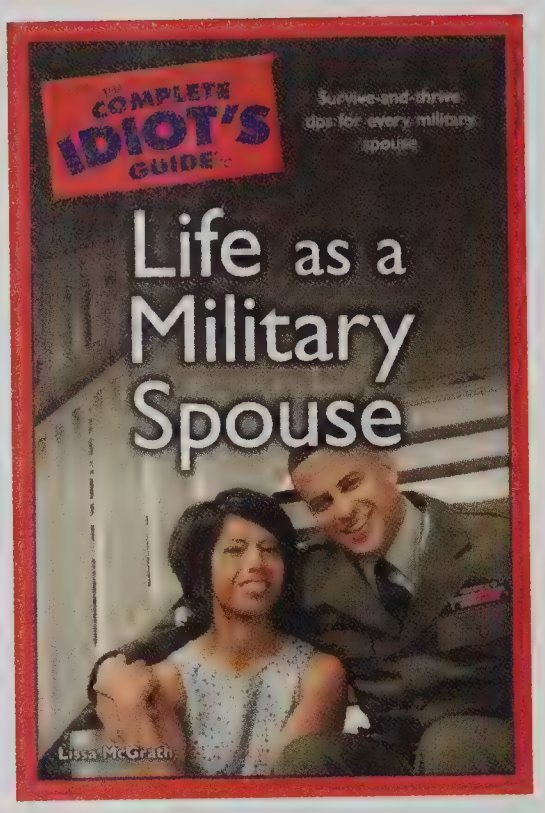
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postdeployment scenarios are covered, including what to do if a military spouse's husband or wife is injured or killed in the field, there is no information regarding the unfortunate but not uncommon scenario of divorce. Overall, however, McGrath's book is a handy resource.

Both volumes offer plenty of information, advice and lists organized into easily accessible formats, written by authors who have "been there, done that." Servicemembers and their spouses will find these books useful and engaging reference tools to ensure that they maximize their well-deserved military benefits.

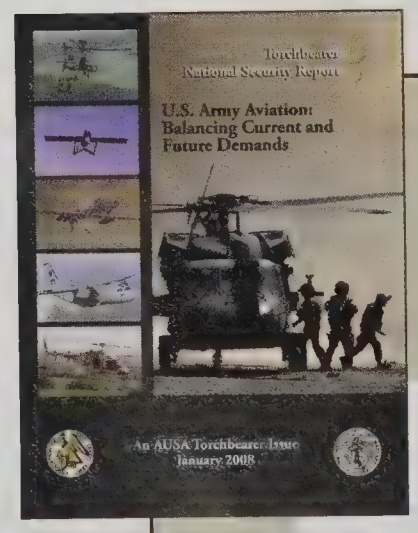
—*Sara Hov*

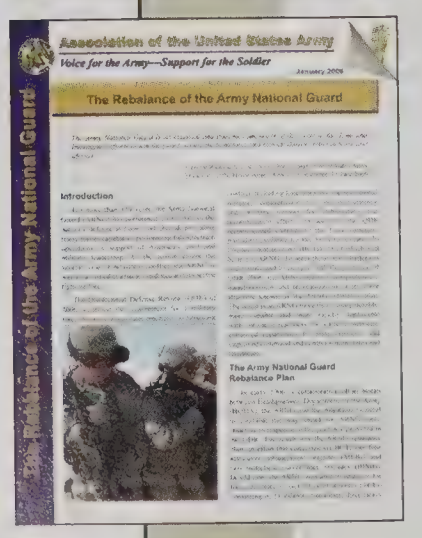
Briefly Noted...

In Words and Deeds: Battle Speeches in History. *Richard F. Miller. University Press of New England. 432 pages; index; $35.*

Richard F. Miller is an author and journalist who has reported on the war in Iraq. His new book, *In Words and Deeds,* surveys battle speeches spanning Western history since Greco-Roman times, exploring the conventions of war oratory and how they have adapted through the years.

Each chapter discusses a category of speech, including instructional speeches, arrival and departure speeches, preinvasion speeches, post-battle speeches and so on. Within particular chapters, further divisions examine subcategories of speech, some of which are unexpected, such as the analysis of an Osama bin Laden speech in the epilogue and the comparison of two spurious battle speeches, one from ancient Rome and one from the Civil War, in





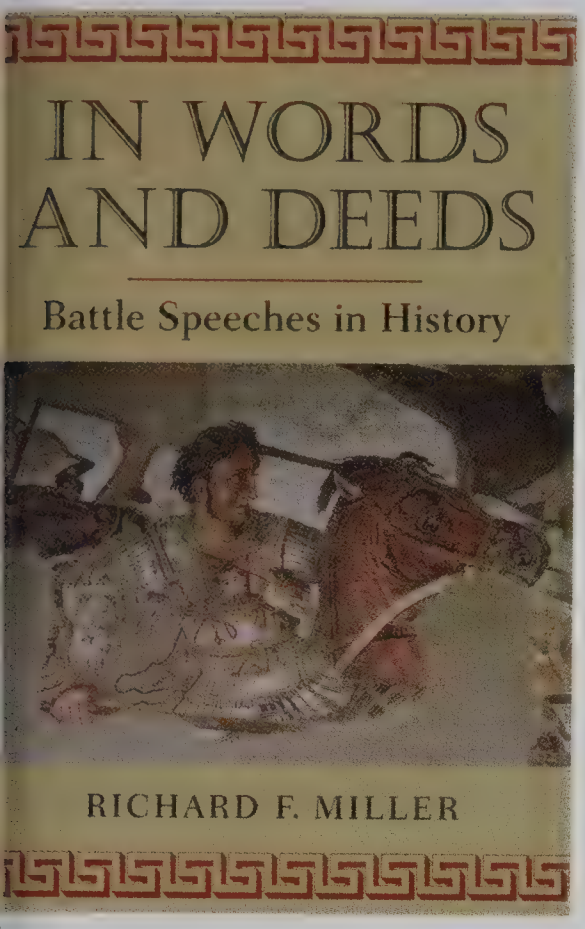
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he "Defenders' Speech of Lies" sec-ion. Though *In Words and Deeds* is not rganized as a quick reference, index ntries for speeches included in the ook are listed in boldface for easy dentification.

Military buffs will enjoy *In Words and Deeds,* but so will those interested in speechwriting and the art of persuasive communication. Miller argues that despite advances in technology, the battle speech is a convention that will continue to adapt and endure. "War is a social activity, only more so," he writes, "and in wars, speech remains the primary means of communicating, only with ever greater and more lethal consequences."

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Historically Speaking

The GI Bill and the Remaking of America

By Brig. Gen. John S. Brown
U.S. Army retired

This summer the Departments of Defense and Veterans Affairs will implement the largest increase in educational benefits since World War II. This is a compliment to all who have lobbied long and hard to further the well-being of returning soldiers, sailors, airmen and marines. It also continues a national tradition of investing in demonstrably responsible young Americans to improve the country as a whole. The first GI Bill—the Servicemen's Readjustment Act of 1944—not only improved America, it transformed it. The gigantic postwar contributions of the Greatest Generation would be hard to imagine without it.

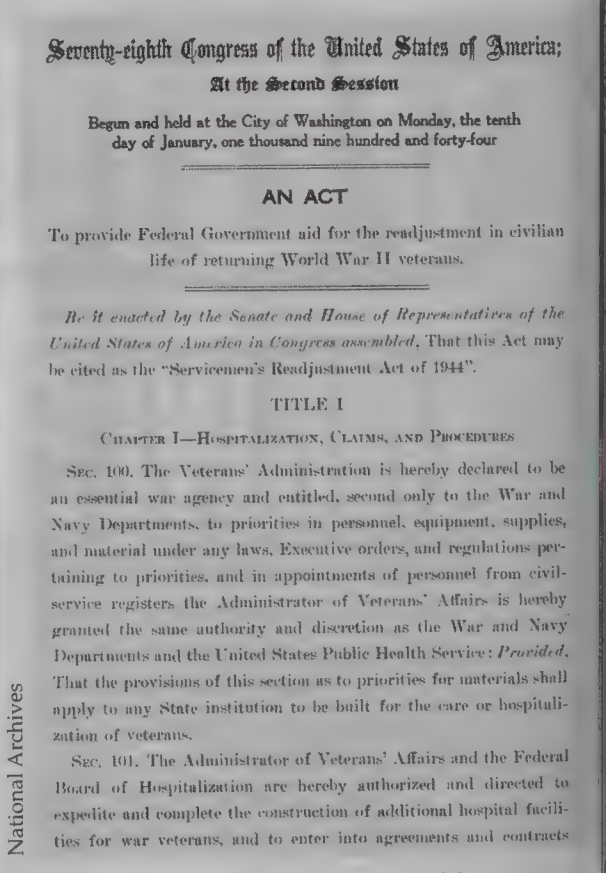
The Servicemen's Readjustment Act of 1944 emerged amid anxieties concerning a return of the Great Depression in the aftermath of World War II. Congressional leaders feared employment would drop as defense spending wound down and the sudden return of 16 million servicemen would push unemployment to unbearable heights. The so-called 52-20 Clause was central to the bill's intent. It authorized former servicemen $20 a week for 52 weeks while they were looking for work, an anticipatory unemployment compensation. The act also authorized stipends to cover college or technical school expenses and low-interest loans to buy a house or start a business. As a pleasant surprise to its authors, the 52-20 Clause proved to be perhaps the least consequential aspect of the bill. Less than 20 percent of the funds set aside for it were used. The returning servicemen sought to substantially improve their lots in life; for most that meant getting an education, owning a home, starting a business or some combination of all three.

About half of the returning World War II veterans pursued educational benefits under the GI Bill. This kept millions out of the labor force temporarily, allowing the economy to make the transition gradually to a postwar posture. It also transformed higher education and contributed to transforming the economy as a whole. Before World War II, fewer than one in 10 young Americans went to college, which was generally viewed as a venue to polish the affluent. Curricula tended to have an elitist bent as well, heavy on the "classics" and a bit dismissive of subjects directly related to making—as opposed to inheriting—money. Some professors despaired of the "educational hobo jungles" the GI Bill created, where eager but cost-conscious students crowded into garages, attics and Quonset huts near campus. Combat veterans were not to be intimidated by academics, however, either in their determination to get an education or in the courses they took. Hard sciences, applied sciences and business management experienced a golden age as federal funds poured in to subsidize the curricula that the veterans chose to pursue. College now had less to do with cultural polishing and more to do with getting a "good job."

This shift in educational emphasis was timely. Industrial and technological advances soon led to far less use of unskilled labor and far more use of professional and managerial talent. In 1956, the number of white-collar workers sur-



U.S. Department of Veterans Affairs



Seventy-eighth Congress of the United States of America;
At the Second Session

Begun and held at the City of Washington on Monday, the tenth day of January, one thousand nine hundred and forty-four

AN ACT

To provide Federal Government aid for the readjustment in civilian life of returning World War II veterans.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Servicemen's Readjustment Act of 1944".

TITLE I

CHAPTER I—HOSPITALIZATION, CLAIMS, AND PROCEDURES

SEC. 100. The Veterans' Administration is hereby declared to be an essential war agency and entitled, second only to the War and Navy Departments, to priorities in personnel, equipment, supplies, and material under any laws, Executive orders, and regulations pertaining to priorities, and in appointments of personnel from civil-service registers the Administrator of Veterans' Affairs is hereby granted the same authority and discretion as the War and Navy Departments and the United States Public Health Service: *Provided*, That the provisions of this section as to priorities for materials shall apply to any State institution to be built for the care or hospitalization of veterans.

SEC. 101. The Administrator of Veterans' Affairs and the Federal Board of Hospitalization are hereby authorized and directed to expedite and complete the construction of additional hospital facilities for war veterans, and to enter into agreements and contracts

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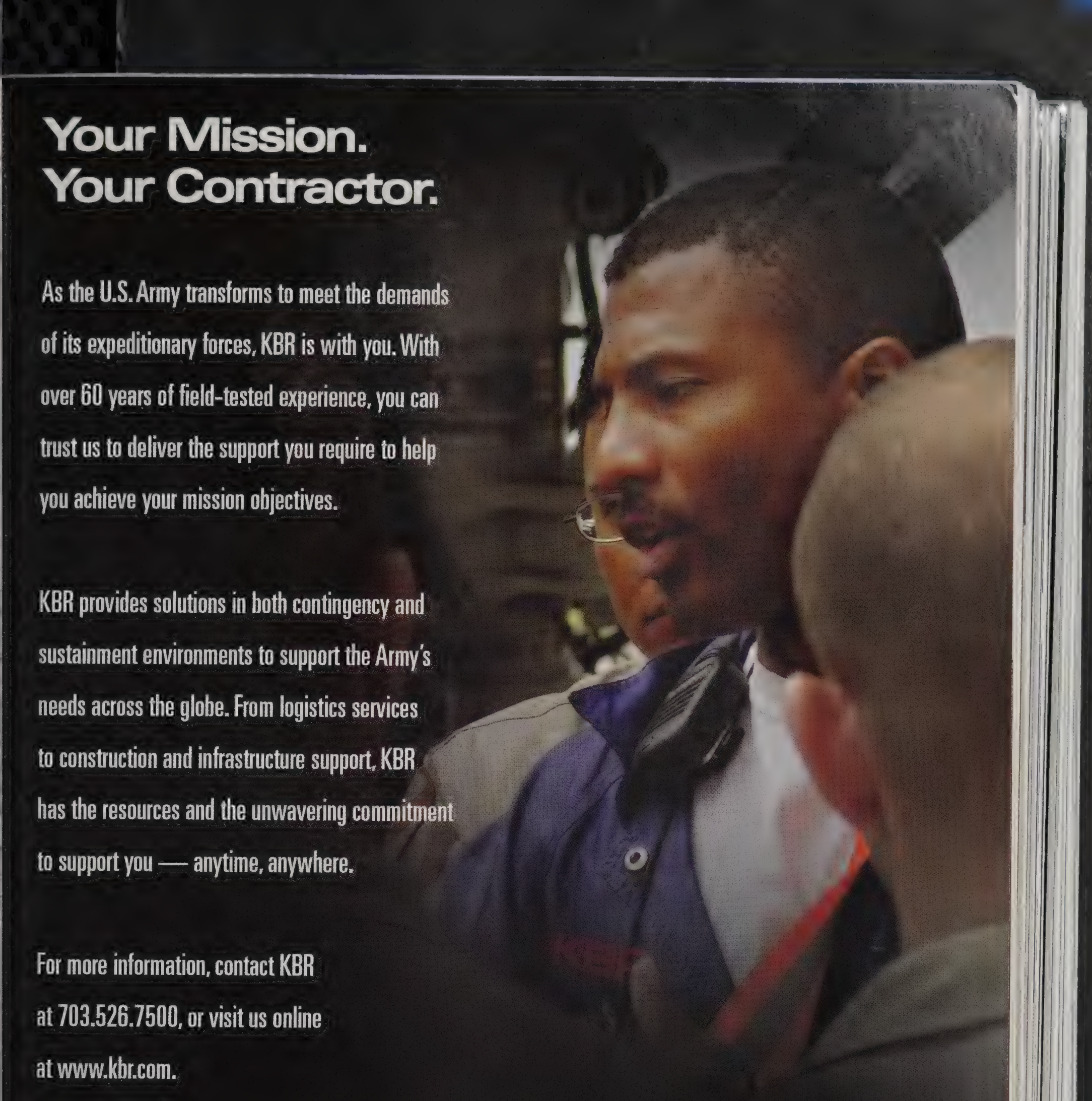
By signing the first GI Bill into law in 1944, President Franklin D. Roosevelt opened educational, home ownership and business opportunities to millions of World War II veterans, establishing a precedent that remains strong today.

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By providing financial support to veterans, the GI Bill transformed U.S. culture and society and the postwar economy.

passed that of blue-collar workers for the first time, and the salaried middle class had increased by more than half in less than 10 years. In addition, the term *blue-collar* was increasingly unlikely to mean unskilled. GI Bill-funded attendance at technical or trade schools propelled millions into higher paying jobs. The boundaries between white-collar and blue-collar work blurred. The socioeconomic middle class grew dramatically.

The rapidly growing middle class needed suitable places to live. This was especially true because it was an unusually productive group. Anxieties during the Great Depression and World War II had delayed marriage and kept birth rates down. With wartime victory and economic prosperity, confidence returned, fueled in part by the broadening opportunities that the GI Bill afforded young people. Marriage rates soared, as did birth rates. The bountiful Baby Boom averaged more than 4 million new babies a year through 1964. Again the GI Bill proved central to socioeconomic transformation. Low-interest loans enabled millions of veterans to buy their own homes. The sheer volume of such loans—and of collateral mortgage insurance guarantees by the Federal Housing Administration—transformed the mortgage industry. Home ownership became a middle-class expectation, and the middle class was exploding in size. Millions poured out of urban apartments to live in newly built affordable suburban houses accessible via newly constructed highways in cars newly purchased with wartime savings—savings made possible by the limited availability of commercial items during wartime rationing.

The resultant economic growth invited entrepreneurship. Once again the GI Bill proved crucial, enabling veterans to seize business opportunities in the proliferating new mix of urban, suburban, industrial and postindustrial venues. By law, the benefits of the Servicemen's Readjustment Act of 1944 were equally accessible to all veterans, regardless of race, ethnicity or creed. In practice, African Americans and others often encountered obstacles locally because of prejudice and discrimination, but dramatically increased access to education, home loans and business loans nevertheless advanced their socioeconomic positions. The World War II experience would prove an important turning point in the long march toward equal rights.

Because the 1944 GI Bill was so successful and so consequential, it has been resurrected on a near continuous basis ever since. It has served both as a reward for service and as an incentive to serve. The numbers of veterans have never been nearly as large as they were in World War II, so the overall transformative effects have not been as dramatic as in the postwar period. GI Bills have nevertheless continued to serve as engines of economic advance and social mobility. Veterans who otherwise could not reasonably have aspired to do so have received educations, bought homes, started businesses and advanced into and through the middle class. The country has prospered from their contributions. They uphold the government, pay their taxes and lead their communities. The underlying premises are simple: A nation's young people are its future. Education and other benefits are best invested in socially responsible young people. Selfless public service, such as military service, is the best single indicator of social responsibility. GI Bills are therefore good investments. We should be pleased that our congressional leaders continue to recognize these relationships. ★

BRIG. GEN. JOHN S. BROWN, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University.

Recommended Reading:

Bennett, Michael J., *When Dreams Came True: The GI Bill and the Making of Modern America* (Washington, D.C.: Potomac Books, 1996)

Mettler, Suzanne, *Soldiers to Citizens: The GI Bill and the Making of the Greatest Generation* (New York: Oxford University Press, 2005)

Olson, Keith, *The G.I. Bill, the Veterans and the Colleges* (Lexington, Ky.: University Press of Kentucky, 1974)

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The Association of the U.S. Army is pleased to announce its fourteenth ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2008.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints, color prints or color slides. Photographs must not be tinted or altered. (Send digital photos to jdow@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The smallest format for slides is 35mm, and slides must be in plastic or paper mounts.
7. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, Social Security number (for identification and tax purposes), address and telephone number, and caption information.
8. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
9. Entries must be postmarked by June 30, 2009. Letters notifying the winners will be mailed in September.
10. Entries will not be returned.
11. Employees of AUSA and their family members are not eligible.
12. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
13. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jeremy Dow (jdow@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.

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Turret gunner PFC Dustin Warner, 1st Squadron, 61st Cavalry, conducts a weapon check before starting a mounted patrol in Afghanistan. The United States plans to nearly double the number of troops deployed to Afghanistan for Operation Enduring Freedom by the end of this summer to increase security, eliminate remaining al Qaeda cells and tamp down a resurgence of the Taliban in parts of the country. Afghanistan is now the main effort. For a report, see page 24.

Paul Avallone

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ARMY MAGAZINE

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NATO at 60 *By GEN Frederick J. Kroesen, USA Ret.* ***Page 13***

Events Confirm the Need to Restore Strategic Balance *By Richard Hart Sinnreich* ***Page 14***

Kenneth Fisher to Receive 2009 Marshall Medal ***Page 16***

Learning at the Speed of War *By LTG James M. Dubik, USA Ret.* ***Page 17***

FEATURES













NATO Celebrates 60th Anniversary
By GEN Bantz J. Craddock, U.S. Army, and Col Michael McLaughlin, U.S. Air Force
Established on April 4, 1949, the North Atlantic Treaty Organization has transformed from a reactive alliance focused largely on defense to an expeditionary, flexible one that works with its members and partners to deter and defeat threats to its collective security. ***Page 19***

Beyond 'An Inconvenient Truth': The Army's March Toward Operational Sustainability
By Addison D. Davis IV
The Army's commitment to environmental stewardship and the future of our planet makes good business and operational sense while enhancing the health of soldiers, Army civilians and their families. ***Page 27***

A Sustainable Future for The Army's Home
By LTG Robert Wilson
Installation Management Command's sustainability campaign, both at home and in theater, focuses on four operational elements: readiness, materiel, people, and services and infrastructure. ***Page 33***

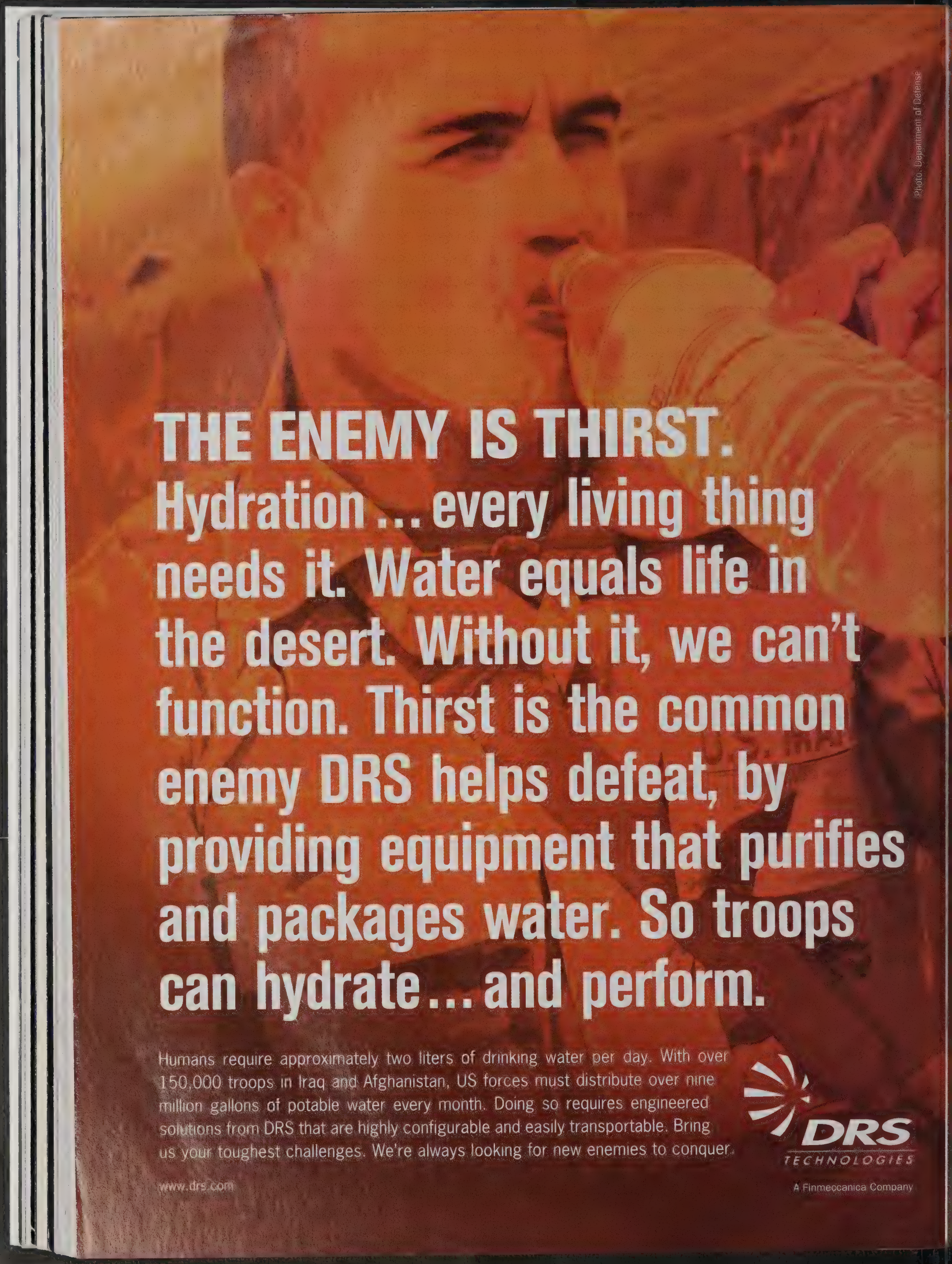
Iraq: A Parade Delayed
By Dennis Steele
The U.S. combat mission in Iraq is scheduled to end on August 31, 2010, and U.S. troops in Iraq will serve as a transition force until a planned completion of the American withdrawal in 2011. ***Page 40***

Portraits from Afghanistan: A Photo Essay
By Paul Avallone
Returning twice to Afghanistan in 2006 and 2008 as a photojournalist, Paul Avallone, a former Green Beret who served in Afghanistan in 2002 and 2003, brings the war on terrorism up close and immediate. ***Page 52***

CompanyCommand—Building Combat-Ready Teams: Consequence Management at the Company Level in Iraq and Afghanistan
Company commanders agree that addressing a problem quickly—being first to convey the truth to the local population following military action—helps instill people's trust and future cooperation. ***Page 63***

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Letters

'What Goes on in Theater ...'

■ I just finished reading "What Goes on in Theater Stays in Theater?" (January "Front & Center"), and LTC Joseph Doty and MAJ Shawn Tenace are spot on. It is an awesome article, and I plan to share it with my subordinate command sergeants major (CSMs) for professional development.

As a former Stryker brigade CSM who left Iraq last June, I can attest it was an everyday fight to ensure that soldiers (and leaders) focused on basic discipline. A soldier does not just wake up in the morning and decide to commit horrific crimes or abuse noncombatants; it is a form of misbehavior shaped by leaders who don't focus their soldiers on the basics. I constantly tell my subordinate CSMs that "if soldiers don't look, act or think like professionals, how can we expect them to perform like professionals on the battlefield?" We also have a lot of leaders who do not have a vision of how our Army should be 12 to 15 years from now, focusing only on the present. It is refreshing to see such a well-written article by two officers who clearly "get it." Thank you for such a great article and for sharing it with the Army.

CSM John Wayne Troxell
U.S. Army Armor Center
and Fort Knox, Ky.

■ The article "What Goes on in Theater Stays in Theater?" was outstanding. I believe it opens the door for something that needs to be dealt with. LTC Doty and MAJ Tenace's term *bracketed morality* is certainly thought provoking. As the command sergeant major of a deployed combat support hospital and former CSM of a large Army hospital, I have seen numerous soldiers who have had behavioral health issues because of the things they had done in combat. Some were acute issues; others were chronic.

Are there connections among bracketed morality, lapses in discipline and perhaps even post-traumatic stress disorder (PTSD)? What about the apparent misplaced eagerness of the staff sergeant in the article who said, "I just want to kill someone, sir"? Is this a result of the "bodies, bodies, bodies" in jody calls? Is the dehumanization of the enemy taught at basic training sites (at least in the old days) really effective in helping a soldier get over having to kill another human being? Civilian police don't use the same training methods. They face danger (albeit more localized) every time they make a traffic stop. Do they have the same rates of PTSD?

Should we develop, as LTC Doty and MAJ Tenace suggest, newer and more relevant methods for teaching and training critical thinking and rules of engagement, intertwined with the Army values? Do the actions of undisciplined soldiers contribute to disenfranchised local nationals turning to become part of the mass base of an insurgency as implied in FM 3-24 *Counterinsurgency*?

Conversely, do we want to teach the tenets of "just war" theory to our young troopers and leaders? Would that cause soldiers faced with a life-or-death decision to pause? Are discipline and morality predictable casualties of a protracted war?

The article should open a dialogue in the institutional Army about the issues raised by the authors. The article is required reading for the Noncommissioned Officer Development Pro-

This Month's Cover

SGT Trevor Ashmore, 3rd Battalion, 66th Armor, 172nd Infantry Brigade, kicks down a wall being used to hide weapons in a Diyala Province village during an operation to disrupt al Qaeda networks in northern Iraq. An Iraq update begins on page 40. *(Cover photograph by SPC Bobby Allen, U.S. Army)*

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gram this month (for my task force NCOs), followed by a paper and discussion of ethical leadership. Kudos to LTC Doty and MAJ Tenace for their efforts.

CSM DAVID J. LITTERAL
Medical Task Force 10, Iraq

Officer Shortage

■ I read MAJ George B. Brown's article, "The Shortage of Army Officers in Year Groups 1991–97," in the February issue with great interest. He raised important concerns and questions and made some pretty good recommendations for retaining the required number of officers.

Unfortunately, it is often the case that when the opportunity opens up to move on to other challenges in the civilian community, a higher percentage of the *quality* people leave. There should be more emphasis not just on retaining the required number of officers but on retaining the number of *quality* officers.

Allowing, if not encouraging, the self-serving, ethically challenged officers to leave the Army while focusing on retaining the really good ones will best serve our Army.

SGM PAUL HARDY, USA RET.
Olympia, Wash.

'Lincoln and the Army'

■ COL Cole C. Kingseed, U.S. Army retired, has done an incredible job in explaining an important issue for all military officers and civilian defense leaders. "Lincoln and the Army: A Model Civil-Military Partnership" (March) made Civil War history come alive and spelled out—even for those only moderately educated in the Civil War—historic events of truly monumental importance. This article has obvious implications for the Army and future chief executives in this time of war. I thoroughly enjoyed it, and it enhanced my appreciation for the heroic struggle of both sides in the War Between the States. It is typical of your outstanding magazine and is a great service to our Army.

LTC ROBERT A. SCHWEHR
Carteret, N.J.

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Washington Report

DoD Allotted $533 Billion in 2010 Budget Request

President Barack Obama's $3.5 trillion fiscal year (FY) 2010 budget requests $533.7 billion for the Defense Department, a 4 percent increase over the current fiscal year. The skeleton request, released by the White House in late February, also asks for $75 billion in emergency spending for military operations in Afghanistan and Iraq for this fiscal year and $130 billion for FY 2010. The budget outline anticipates continued U.S. withdrawal of combat forces from Iraq in 2010.

The outline requests pay raises of 2.9 percent for military members, which matches—but does not exceed—average private-sector wage growth; it asks for a 2 percent raise for federal employees. The President's budget calls for funding the Army's 15,000-soldier increase to 547,400 in the active force by the end of 2009. It also supports the expansion of concurrent receipt and Veterans Disability Compensation.

Among other requests included in the budget outline are:

■ Increase VA funding by $25 billion over the next five years and expand eligibility for VA health care to nondisabled veterans earning modest incomes and those who do not have service-connected conditions.

■ Expand Pentagon and VA pilot programs to expedite the processing of injured troops through the Disability Evaluation System.

■ Support continuing efforts to improve medical care and housing for wounded, ill and injured servicemembers.

■ Fund a comprehensive DoD traumatic brain injury registry and increase the number of mental health professionals integrated with deployed units.

■ Continue to sustain and modernize dormitories and barracks housing for servicemembers and work to end inadequate housing for military families.

The White House assigned the task of establishing the details of the budget plan to Secretary of Defense Robert M. Gates. Although no specific program has been singled out for cuts or delay, Gates has already warned that "hard choices" will have to be made. One alleged candidate for cancellation or delay is Future Combat Systems. Before the budget outline was released, Gates asked those participating in the discussions to sign a nondisclosure statement because he wants the budget to be judged in its entirety rather than piecemeal through leaks.

At a Pentagon press conference after the budget outline was released, the Defense Secretary told reporters: "In the days to come, any information you may receive about budget or program decisions will undoubtedly be wrong because I intend to wait until the end of our review process before making any decisions."

The Obama administration has announced that it will deliver a full FY 2010 defense spending plan to Congress this month.

DoD Funds Construction, Mortgage Relief. The $7.4 billion Department of Defense portion of President Barack Obama's $787 billion economic stimulus package will fund military construction and help military families avoid foreclosure.

The American Recovery and Reinvestment Act of 2009 authorizes $4.2 billion to operations and maintenance accounts to upgrade military facilities, including energy-related improvements. Under the legislation, $1.3 billion will go to military construction for hospitals, and $240 million will fund child development centers. Some $600 million will fund military housing projects for troops and their families, and $100 million will go to building warrior transition complexes.

One important aspect of the law provides $555 million to help military personnel who incur financial loss due to forced relocation. A new program established in the stimulus package—the Homeowners Assistance Fund—expands a program originally designed to help homeowners selling their property in areas where real estate values have declined because of base closure. The new fund applies only to a servicemember's primary residence and only to homes bought before July 1, 2006, roughly the time when the housing market began to decline. It covers wounded warriors who need to move for medical reasons, surviving spouses of those killed in action and DoD personnel ordered to relocate. The act also allows the Secretary of Defense to acquire the title to a person's property or to reimburse the individual for losses after a private sale or foreclosure.

The stimulus package also provides DoD with $300 million to develop energy-efficient technologies and $120 million for the energy conservation investment program, a subset of the defense agencies military construction program designated for projects that save energy or reduce defense energy costs. An additional $15 million is dedicated for inspector general oversight and audit of stimulus spending.

DoD to Allow Ceremony Photos. The Department of Defense has reversed the blanket restriction instituted by President George H.W. Bush in 1991 that barred the media from photographing honor guard ceremonies that mark the return of fallen U.S. troops arriving at Dover Air Force Base, Del.

President Barack Obama requested that Secretary of Defense Robert M. Gates review the policy. Secretary Gates said that he "decided that the decision regarding media coverage of the dignified transfer process at Dover should be made by those most directly affected—on an individual basis—by the families of the fallen." News media may photograph the flag-draped caskets if the families of the soldiers agree.

Secretary Gates has appointed a working group to quickly develop a plan to implement the policy.

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SUREFIRE

News Call

More Troops Will Deploy to Afghanistan

Secretary of Defense Robert M. Gates has announced President Barack Obama's decision to order the 5th Stryker Brigade Combat Team (SBCT), 2nd Infantry Division, Fort Lewis, Wash., and the 8,000-troop 2nd Marine Expeditionary Brigade, Camp Lejeune, N.C., to Afghanistan.

"The situation in Afghanistan and Pakistan," announced the President in a White House statement, "demands urgent attention and swift action." An additional 5,000 troops will be deployed in smaller units to support the combat troops. It was his first deployment decision as President.



DoD/Fred W. Baker III

Two soldiers, part of Task Force Spartan from the 10th Mountain Division's 3rd Brigade Combat Team, walk their vehicle through the muddy paths of Forward Operating Base Airborne in Afghanistan's Wardak Province in early March.

The 5th SBCT, originally slated to go to Iraq this summer, will add about 4,000 soldiers and 300 Stryker armored vehicles to the fight in Afghanistan. GEN David McKiernan, commander of U.S. Forces Afghanistan and NATO's International Security Assistance Force, specifically requested an SBCT for the mobility, situational awareness, protection and infantry troops it would provide. The Stryker brigade concept has proved successful in urban areas since December 2003 when it was introduced to live combat in Iraq, but it has never been used in Afghanistan.

The re-missioned 5th Stryker Brigade will operate in southern Afghanistan and along the Pakistan border, regions less mountainous than the northern part of the country, where Canadian forces equipped with the Grizzly armored personal carrier, a vehicle similar to a Stryker, have been in place. In addition to providing security, the SBCT will train and organize Afghan police and army personnel. This is the unit's first combat deployment since it was activated at Fort Lewis in May 2007.

When GEN McKiernan took command in Afghanistan in June 2008, he requested 30,000 additional troops. There are currently about 38,000 U.S. combat troops in Afghanistan, including the 3rd Brigade Combat Team (BCT), 10th Mountain Division, Fort Drum, N.Y., which was re-missioned from Iraq and began operations in Logar and Wardak Provinces in February. The two provinces' remote locations and small Coalition presence made them targets for insurgent activity.

The 3rd BCT has tripled the area's combat firepower; before its arrival, only a company-sized element of Coalition forces occupied the two provinces. The BCT commander, COL David B. Haight, has pushed his troops out of the base and into remote combat outposts near the villages, especially in the Jalrez and Tangi Valleys—historical hot spots for enemy fighters. Soldiers patrol the villages each day and hope to build relationships with local leaders before the insurgents return in the spring.

President Obama, who ordered a strategic review of U.S. policy in Afghanistan upon taking office, said in a White House press statement that the "troop increase does not predetermine the outcome of that strategic review."

Additional Upcoming Deployments

to Iraq

- 4th Stryker Brigade Combat Team, 2nd Infantry Division, Fort Lewis, Wash., (approximately 4,000 soldiers) will deploy in the fall to replace 3rd Brigade, 2nd Infantry Division.
- 32nd Infantry Brigade Combat Team, Wisconsin National Guard, (approximately 3,200 soldiers—the largest Wisconsin ARNG operational deployment since World War II) will deploy after completing training at Fort Bliss, Texas.

to Afghanistan

- 82nd Airborne Division Headquarters, Fort Bragg, N.C., (about 800 soldiers) will deploy beginning in late spring to relieve the headquarters of the 101st Airborne Division (Air Assault).
- 4th Brigade Combat Team, 4th Infantry Division, Fort Carson, Colo., (about 4,000 soldiers) will deploy beginning in late spring to replace the 3rd Brigade Combat Team, 1st Infantry Division.
- 48th Infantry Brigade, Georgia National Guard, (approximately 2,400 soldiers) will deploy to Afghanistan in waves between March and June, where they will train Afghan police and military forces.

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U.S. Army

CTC Honors GEN Downing. The West Point Association of Graduates, in cooperation with the Department of the Army and the Combating Terrorism Center (CTC) at the U.S. Military Academy at West Point, has established a scholarship named for the late GEN Wayne A. Downing, U.S. Army, who was the first Distinguished Chair of the CTC.

The annual scholarship will provide two junior leaders with two years of advanced education, foreign language skills and cultural immersion. Institutions recommended for the academic study portion of the Downing Scholarships include Columbia University, School of International and Public Affairs; Georgetown University National Security Program; Harvard University, Kennedy School of Government; Johns Hopkins University, School of Advanced International Studies; Syracuse University, Maxwell School of Citizenship and Public Affairs; and Tufts University, Fletcher School of Law and Diplomacy. Foreign-based schools are located in the U.K., Israel and Singapore. In addition, Downing Scholars will serve as fellows of the CTC at West Point, where they will design individual programs including exposure to foreign counterterrorism forces and language training to complement their academic studies.

The program is open to Army officers from all commissioning sources who have between three and 11 years of service. Qualified candidates will be nominated through the Army's Human Resources Command; final selection will be made by the West Point Association of Graduates.

Iraq Drawdown. Multi-National Force-Iraq (MNF-I) announced in March that two brigade combat teams scheduled to redeploy in the next six months along with enabling forces such as intelligence, logistics and engineers will not be replaced.

"The time and conditions are right for Coalition forces to reduce the number of troops in Iraq," said GEN Raymond Odierno, commanding general, MNF-I. "In the coming months, Iraqis will see the number of U.S. forces go down in the cities while more and more Iraqi flags will go up at formerly shared security stations."

The drawdown of forces will reduce the total number of U.S. brigade combat teams in Iraq from 14 to 12, or approximately 12,000 fewer U.S. troops in Iraq.

Electronic Warfare Update. The Army's introduction of a new field manual (FM) for electronic warfare (EW), coupled with its establishment of an EW career field for officers, warrant officers and enlisted personnel, reflects the service's recognition of the importance of managing cyberspace and the broader electromagnetic spectrum in modern conflicts and elevating EW to a core capability.

The new manual, FM 3-36 *Electronic Warfare in Operations,* was released at the 2009 Association of the U.S. Army Winter Symposium and Exposition in Fort Lauderdale, Fla.; it is the first new EW doctrinal publication in more than a decade. After the Cold War, the Army's electronic warfare capabilities declined; in Iraq and Afghanistan, improvised explosive devices triggered by cell phones, garage-door openers and other off-the-shelf hardware, as well as other nontraditional warfare, compelled the Army to rebuild its electronic warfare capability.

The 112-page manual is organized into seven chapters, each of which addresses a major aspect of operations, and six appendices that provide greater

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from February 1 to February 28, 2009. All names have been released through the Department of Defense; families have been notified.

SSG Jeremy E. Bessa, 26
CPT Brian M. Bunting, 29
SSG Jason E. Burkholder, 27
SPC Peter J. Courcy, 22
MSG David L. Hurt, 36
SFC Raymond J. Munden, 35
SGT Schuyler B. Patch, 25
SSG Marc J. Small, 29
1LT Jared W. Southworth, 26
SGT Scott B. Stream, 39
CW4 Milton E. Suggs, 51
SGT Daniel J. Thompson, 24
PFC Jason R. Watson, 19

Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from February 1 to February 28, 2009. All names have been released through the Department of Defense; families have been notified.

SPC Micheal B. Alleman, 31
SSG Mark C. Baum, 32
SPC Brian M. Connelly, 26
LTC Garnet R. Derby, 44
SSG Sean D. Diamond, 41
SPC James M. Dorsey, 23
1LT William E. Emmert, 36
SPC Darrell L. Fernandez, 25
PFC Albert R. Jex, 23
CPL Michael L. Mayne, 21
PFC Zachary R. Nordmeyer, 21
PFC Jonathan R. Roberge, 22
SPC Christopher P. Sweet, 28
CPL Stephen S. Thompson, 23
PFC Cwislyn K. Walter, 19
SGT Joshua A. Ward, 30

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GENERAL OFFICER CHANGES*



MG D.M. Campbell Jr. from CG, USAARMC and Fort Knox/Cmdt. USAARMS, Fort Knox, Ky., to CG, USAREC, Fort Knox.



MG J.M. Milano from CG, CPATT, MNSTC-I, OIF to CG, USAARMC and Fort Knox/ Cmdt. USAARMS.



MG D.G. Perkins from Dep. CoS for Strategic Effects, MNF-I, OIF to CG, 4th Inf. Div. (M), Fort Hood, Texas.



MG J.L. Terry from Dir. FFID, ARCIC, TRADOC, Fort Bliss, Texas, to CG, 10th Mountain Div. (L) and Fort Drum, N.Y.

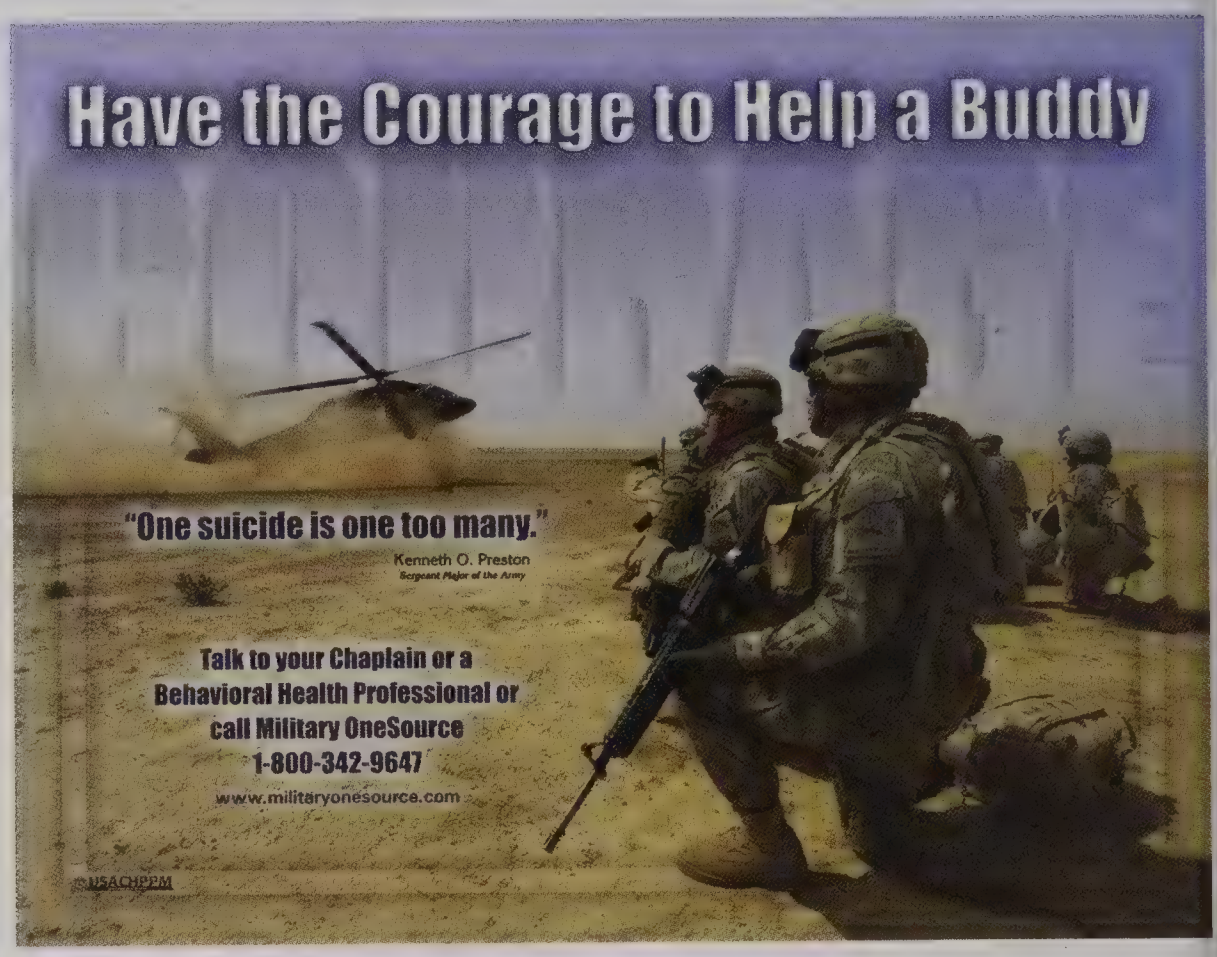


MG M.S. Tucker from Dep. CoS, Ops., ISAF, OEF to CG, 2nd Inf. Div., Eighth U.S. Army, Korea.

Brigadier General: **T.A. Wolff** from Spec. Asst. to the President and Sen. Dir. for Iraq, NSC, The White House, Washington, D.C., to CG, 1st Armored Div., USAREUR and Seventh Army.

■ ***ARCIC***—*Army Capabilities Integration Center;* ***CPATT***—*Civilian Police Assistance Training Team;* ***FFID***—*Future Force Integration Directorate;* ***ISAF***—*International Security Assistance Force;* ***MNF-I***—*Multi-National Force-Iraq;* ***MNSTC-I***—*Multi-National Security Transition Command-Iraq;* ***NSC***—*National Security Council;* ***OEF***—*Operation Enduring Freedom;* ***OIF***—*Operation Iraqi Freedom;* ***TRADOC***—*U.S. Army Training and Doctrine Command;* ***USAARMC***—*U.S. Army Armor Center;* ***USAARMS***—*U.S. Army Armor School;* ***USAREC***—*U.S. Army Recruiting Command;* ***USAREUR***—*U.S. Army Europe.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*



Suicide Prevention. *In response to an increasingly high suicide rate and to reduce the stigma associated with seeking mental health care, the Army has stepped up its suicide prevention program. Videos, briefings, intervention tip cards, manuals and "Ask, Care, Escort" skills training are available online at the U.S. Army Center for Health Promotion and Preventive Medicine: http://chppmwww.apgea.army.mil/dhpw/Readiness/suicide.aspx*

depth to specific areas. FM 3-36 explains how to set up EW, how to integrate it, and how to evaluate and use the equipment at brigade, division, corps and component-command levels. The manual also provides a foundation and framework for developing coordinated and cohesive EW at all echelons.

The Army's establishment of a new EW 29-series career field also acknowledges that EW is critical to both asymmetrical and conventional warfare. The Army plans to add some 1,600 EW personnel over the next three years. Pilot courses are being conducted at Fort Sill, Okla. One officer pilot course has been completed, another is under way; warrant officer and enlisted pilot courses are slated to begin this spring and summer.

The Army is in the process of institutionalizing an EW force structure at every level from Army service component to battalion in the active component, Army National Guard and the Army Reserve and is considering adding an additional 2,300 people to the career field as personnel become available. Creation of the new career field will eventually give the Army the largest professional EW workforce of all the services.

For more information or to download FM 3-36 *Electronic Warfare in Operations,* visit the Combined Arms Center web site at http://usacac.army.mil/cac2/.

Benefits Information. The Army's G-1 staff recently launched a redesigned web site that consolidates all Army benefits information in one location. The one-stop site, myarmybenefits.us.army.mil/EN/default.aspx, lists information on 150 different benefits ranging from education assistance to child care and contains fact sheets describing family services, recreation programs, health care, spouse employment assistance and many other benefits.

There are also 54 state and territory fact sheets, each of which describes the benefits for soldiers who live in that specific area. Distinct wounded warrior and survivor sections of the site provide information for families of severely injured soldiers and surviving family members, respectively. ★

Front & Center

NATO at 60

By GEN Frederick J. Kroesen
U.S. Army retired

In April 1949, 12 nations of Western Europe and North America formed the North Atlantic Treaty Organization (NATO). It became the most successful, long-lasting military pact in history. Its hierarchy presided over military defense plans designed to guarantee the security of Western Europe, carrying out its mission successfully for more than 40 years before the collapse of its principal opponent, the alliance of the Warsaw Pact. "Mission accomplished" was an appropriate claim at the end of the 20th century as the Berlin Wall fell and the nations of Eastern Europe declared their independence from the hegemony of the Soviet Union.

Born in reaction to the intransigence of the communist hierarchy in the Soviet Union and its attempts to subjugate Greece, Turkey and the city of Berlin, NATO formed a complex of air, naval and land forces under an international group of headquarters and promised the commitment of all national forces to the mission of common defense. Success was the product of the consistent deterrence of offensive operations by the Warsaw Pact countries and a commitment to a military defense posture credibly sufficient to defeat any incursion into NATO territory.

The credibility of that defense, based primarily, at first, on the threat of nuclear retaliation, was strengthened when Greece and Turkey joined NATO in 1952. But the greatest increase in military prowess occurred when West Germany was admitted in 1955 and deployed its three corps of armored and mechanized forces among those initially committed on the central front.

All did not go smoothly. Each nation seemed committed only to its own interpretation of when the terms of the pact were in force. Each nuclear power insisted upon the authority to independently determine if, when and where its weapons would be employed. Many governments assigned national missions to their forces to be carried out simultaneously with combat operations, a conflict of interest that affected training exercise decisions and was never resolved.

Political demands limited operations planning, prohibiting any reference to offensive or counteroffensive action that would cross the border of a Warsaw Pact country. NATO forces would defend in forward areas, limiting artillery fire and close air targeting to NATO territory unless government approval was obtained for any cross-border mission. Concerning the use of nuclear weapons, the time involved for obtaining nuclear decisions almost precluded any use of timely tactical, short-range, low-yield battlefield warheads. Each nation controlled its own intelligence. The Central Army Group (CENTAG) commander, an American, could not divulge certain information to his chief of staff, a German, nor could he fully inform the Canadian operations officer.

The NATO logistics system was always restricted by the rule that each nation was responsible for supporting its own forces. That meant that the Canadian, Belgian or Dutch forces were limited to specific geography and that an American air cavalry unit could not be shifted from CENTAG to the North Army Group, for example. That the versatility of operations was hampered by this fact was recognized early but was difficult to resolve. It was impractical to equip and train an American maintenance unit to repair German tanks or British radios, or British units to maintain American helicopters. The ultimate solution—equipping all forces identically—was unthinkable for any one nation's industry.

The modernization of forces was also a recurring problem. A new tank or plane was costly—unaffordable by all nations simultaneously—so the logistics system has always had duplicate demands. A single coordinated communications network connecting the various headquarters was an obvious requirement, and CIP 67 (Communications Improvement Program 67) was adopted. Multinational approval finally occurred in 1981—still specifying the by-then-outmoded 1967 equipment.

The decision of France in 1966 to withdraw its forces and to close NATO installations and headquarters in France was a costly and disruptive event, but one that ultimately had little impact on the capabilities of the alliance. The French guaranteed that their forces would be available if NATO went to war, so they continued to take part in exercises and training missions. The real effects were to move headquarters and supplies forward into Belgium and Germany and to deprive the French of any senior command or staff positions. Practically, the field commands could ignore the requirement to publish all paperwork in two languages, English and French. (As we go to press, France has just announced a return to NATO with a formal "signing" during this month's anniversary celebration.)

One of the greatest contributions to the success of NATO was the adoption of a single language as the operational norm. When Germany joined, the government decreed that its officer corps would have a working knowledge of English. Thereafter, operations above corps level were directed in English, all conferences were conducted in English and the understanding of all leaders was common. Thus the coordination of all high-level activities was simplified and strengthened as a result.

The end of the Cold War raised immediate questions concerning the future of NATO. Many predicted its demise, citing obsolescence and promising the long-awaited "peace dividend" to the people of all NATO nations.

Others, mindful that NATO was the most successful of all institutions engaged in international affairs, advocated broadening NATO's interests into political, economic and other activities requiring collective attention. They also believed that great political benefit would ensue from an expansion of the alliance throughout all of Europe.

Each argument had its merits. Ultimately, the armed forces of all NATO nations were drastically reduced, and peace dividends were redirected to social and other needs by all governments. NATO was not disbanded, however. In succeeding years, membership has increased to 26 countries, the geographical area to be protected has almost doubled and further expansion is still being contemplated.

The addition of new member states is, perhaps, a political triumph, but it also exacerbates the problems that have plagued military planning in the past. No demand was made that the increased risk of expanding the territory be balanced by the increased military capabilities of the new member states. The new forces were primarily equipped with Soviet (now Russian) materiel that NATO logistics cannot support, and they were organized and trained in accord with Soviet doctrine. Communications systems were completely incompatible, and the acceptance of English as the operational language was debatable. Intelligence is even more fragmented, and the commitment of all nations to the pledge that an attack on one will result in a reaction from all is strained by the inclusion of more remote areas. And all such problems will be compounded if, as contemplated, the NATO border is moved further east.

The next chapter in the NATO saga is yet to be written. Honoring the "attack on one" promise, NATO followed the United States to war in Afghanistan, its first-ever commitment outside of Europe. NATO now provides the command structure directing the campaign. Participation, however, is neither universal nor consistent as some countries remain uncommitted; all members furnish fewer troops than the United States; some joined, then withdrew; and others restricted the use of their forces, hoping to prevent casualties. We are a long way from winning in Afghanistan, and effective participation by NATO will be an important factor; it must, however, become more robust, more consistent and long-term. The political acceptance of the NATO nations of this reality does not yet guarantee such commitment.

There is no question that NATO has much to celebrate as we review the success of the last 60 years. Europe has enjoyed the longest period of peace in its history. Potential enemies were deterred from launching a military attack for 40 of those years, and new threats have not developed. NATO's success probably has also been a prime factor in the decisions that led to the formation of the European Union. As we have learned from the stock market, however, past success is no guarantee of future performance. □

GEN FREDERICK J. KROESEN, USA Ret., is a former commander in chief of U.S. Army Europe and a senior fellow of AUSA's Institute of Land Warfare.

Events Confirm the Need to Restore Strategic Balance

By Richard Hart Sinnreich

Three news stories in February are a tacit reminder, were one really necessary, that America's strategic challenges aren't limited to al Qaeda and the Taliban, or even to Islamic extremism generally.

The first reported the dismal outcome of the annual meeting of the World Economic Forum in Davos, Switzerland, at which one speaker after another blasted the United States as the principal author of the current global economic and fiscal crisis.

That those accusations were fueled by more than a little hypocrisy is beside the point. No one should be surprised that foreign bankers, investors and political leaders, who were more than happy to ride on the coattails of American prosperity during its salad days, have short memories now that the ride is over.

The fact remains that, unless the United States is careful, such antagonism easily could set off the same sort of mindless competitive protectionism that helped turn the market crash of 1929 into a worldwide economic depression, from which only a world war —to which it roundly contributed— finally "rescued" us.

The second story concerned Kyrgyzstan, one nation removed from Afghanistan geographically, whose president announced that his government had decided to close the U.S. air base at Manas, the only such base in Central Asia and a key supply node for NATO forces in Afghanistan.

That announcement was disturbing enough. What made it even more disturbing was its delivery in Moscow— where, on the very next day, Russian President Dmitry Medvedev announced plans to establish a Russia-led and -funded Central Asian military rapid reaction force, intended, in his words, "to rebuff military aggression."

Medvedev was careful not to specify just whose aggression he had in mind, but his bland declaration that the new force would be "no weaker than similar forces of the North Atlantic alliance" certainly offered more than a hint.

The last story came from the Far East, where North Korea declared that it was cancelling all security agreements and negotiations with South Korea, followed by reports that it might be preparing to resume testing of its potentially nuclear-capable Tae

podong-2 long-range ballistic missile.

Pyongyang's relations with its southern neighbor have been deteriorating for months, and while some Korea-watchers speculate that its recent belligerence might simply reflect an internal power struggle, its past behavior warns against discounting the secretive communist regime's readiness to risk destabilizing the peninsula for purposes that it alone understands.

Together, these reports confirm several recent strategic analyses suggesting that the world has entered a particularly volatile period. In such periods, a recently released Pentagon concept paper warns: "Friction and uncertainty abound ... accidents and miscalculations are common, and apparently negligible events produce disproportionate and often unintended consequences."

Just such a period preceded the First World War, perhaps the most consequential conflict since the fall of Rome. Sparked by an otherwise trivial event in the Balkans, it ultimately killed 18 million people, shattered four great empires and permanently altered the shape of the international system.

That tragedy occurred in part because the great powers of the time failed to recognize how action in one arena might affect others. Those claiming, as some have, that World War I erupted by accident give insufficient credit to human obtuseness.

Despite that experience, we, too, have had a bad habit of becoming wholly preoccupied with a single strategic problem to the virtual disregard of other challenges. There may be some justice to Defense Secretary Robert Gates' complaint that defense planners are too prone to what he calls "next-war-itis," but the same can't be said of U.S. foreign policy overall, which in recent years has suffered, if anything, from the opposite tendency.

Nor is that a novel problem. Throughout much of the Cold War, U.S. policymakers tended to view virtually every international problem through the lens of the East-West ideological competition, even when that contest was utterly remote from the concerns of the other parties involved.

To say that the resulting strategy lacked nuance would be awarding it too much credit. But lack of discrimination was only one of its defects. Perhaps even more damaging was its persistent failure until the Nixon administration to recognize and respect the linkages among those disparate strategic challenges.

What was dangerous during the Cold War, when the superpower standoff imposed at least some restraint on military behavior, is far more dangerous today, when no such disciplining mechanism prevails. For that reason if no other, no task confronting the new administration is more essential than restoring some strategic balance to America's foreign policy. □

RICHARD HART SINNREICH writes regularly for The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the February 8, 2009* Lawton Constitution *and is reprinted by permission of the author.*

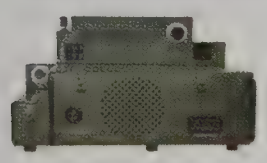
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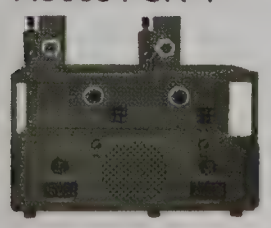
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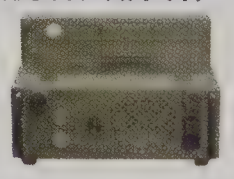


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Kenneth Fisher to Receive 2009 Marshall Medal

The Association of the U.S. Army has selected Kenneth Fisher, chairman of the board of trustees and chief executive officer of the Fisher House Foundation, as the recipient of this year's George Catlett Marshall Medal, the association's highest honor. The Marshall Medal is awarded annually to an individual who has exhibited selfless service to the United States of America.

AUSA's council of trustees will present the award to Fisher in recognition of his contributions to the armed forces and his dedication to caring for combat casualties and their families. The presentation will take place on October 7 at the George Catlett Marshall Memorial Dinner, the culmination of the three-day AUSA Annual Meeting and Exposition held at the Walter E. Washington Convention Center in Washington, D.C.

"Following in the footsteps of his uncle and aunt, Zachary and Elizabeth Fisher, and his father, Arnold," said AUSA President GEN Gordon R. Sullivan, USA Ret., "Ken Fisher has devoted his time, talents and business acumen to ensure that our brave wounded warriors and their families are treated with the utmost dignity and respect as patients and families stay in a Fisher House—a much needed and appreciated home away from home—free of charge and for as long as necessary.

"In a time of prolonged and persistent conflict where our troops are sacrificing their well-being to preserve freedom and liberty, it is comforting to know that if our servicemembers and veterans are in need of medical assistance, rehabilitation, treatment or care, their families—because of Ken Fisher's perseverance, generosity and love of country—are well taken care of and have direct access to their loved ones while in a military hospital or rehabilitation center."

Fisher is a senior partner in the family-owned New York City real estate development firm Fisher Brothers, which constructs, leases and manages commercial space in midtown Manhattan. In 2003, Fisher succeeded his father as chairman of the board of trustees and CEO of Fisher House Foundation, the organization founded in 1990 to provide free temporary housing for hospitalized military personnel and veterans. Approximately 120,000 families have stayed in Fisher Houses since 1990, using 3 million lodging days and $100 million in lodging costs, food and transportation.

When Fisher took over the foundation, there were 32 houses. "Under his dynamic and creative leadership,"



Kenneth Fisher

AUSA officials said, "there are now 43 houses with plans to construct 12 more in 2009. The foundation has a goal of 62 residences by the end of 2011." Now that patients as well as families may live in a house, Fisher insists that each room of every new home be handicapped accessible. The typical Fisher House now being built is an eight to 20-suite home on two levels, more than three times the size of the original houses. Building a Fisher House originally cost about $700,000; depending on its location, a new home currently costs between $5 and $6 million.

The houses are strategically located within walking distance of treatment centers; 18 are on military installations, including Tripler Army Medical Center in Honolulu, Hawaii, and Landstuhl Regional Medical Center in Germany, and 10 are located at VA medical centers. In 2008, Fisher Houses accommodated 12,000 families.

The Fisher House Foundation administers several special programs in addition to its houses. The scholarships for military children program has awarded more than $6.4 million to more than 4,100 sons and daughters of servicemembers and each year donates $100,000 for spouse scholarships to the National Military Family Association. The foundation also participates in the Operation Hero Miles program, which has donated 16,000 free airline tickets to hospitalized servicemembers and their families, saving them more than $21 million in transportation costs. A partnership among the Fisher House Foundation, Newman's Own and the Army Times Publishing Co. has awarded more than $500,000 in grants to 114 volunteer organizations working to improve military quality of life.

In 2005, former Secretary of the Army Francis J. Harvey presented Fisher with the Decoration for Distinguished Civilian Service, and in 2007 President George W. Bush appointed him to the President's Commission on Care for America's Returning Wounded Warriors.

"As a well-recognized and highly respected voice in articulating the needs of our wounded warriors and their families," said GEN Sullivan, "Ken Fisher is an internationally known philanthropist who uses his unique and singular talents to benefit our sons and daughters, who sacrificed so much while serving in harm's way, and their families and relatives.

"The Association of the U.S. Army—on both the national and chapter levels—has been a proud and continuing supporter of the Fisher House Foundation and all it does for our heroes and their families," GEN Sullivan added. "It is an honor for us now to recognize Ken Fisher. He is truly deserving of AUSA's highest award."

Learning at the Speed of War

By LTG James M. Dubik
U.S Army retired

Anticipate, act, assess; action, reaction, counteraction; outfox the enemy as well as outfight him... War is as much a mental phenomenon as it is a physical and emotional one. Change, ambiguity and flexibility are some of the few constants on the battlefield.

These constants have long led commanders to recognize the need to give subordinates mission-type orders and to express the overall intent for a given operation. Doing so ensures that subordinates have the flexibility to react to the unexpected and use their initiative—within that intent—to take advantage of unforeseen opportunities during battle.

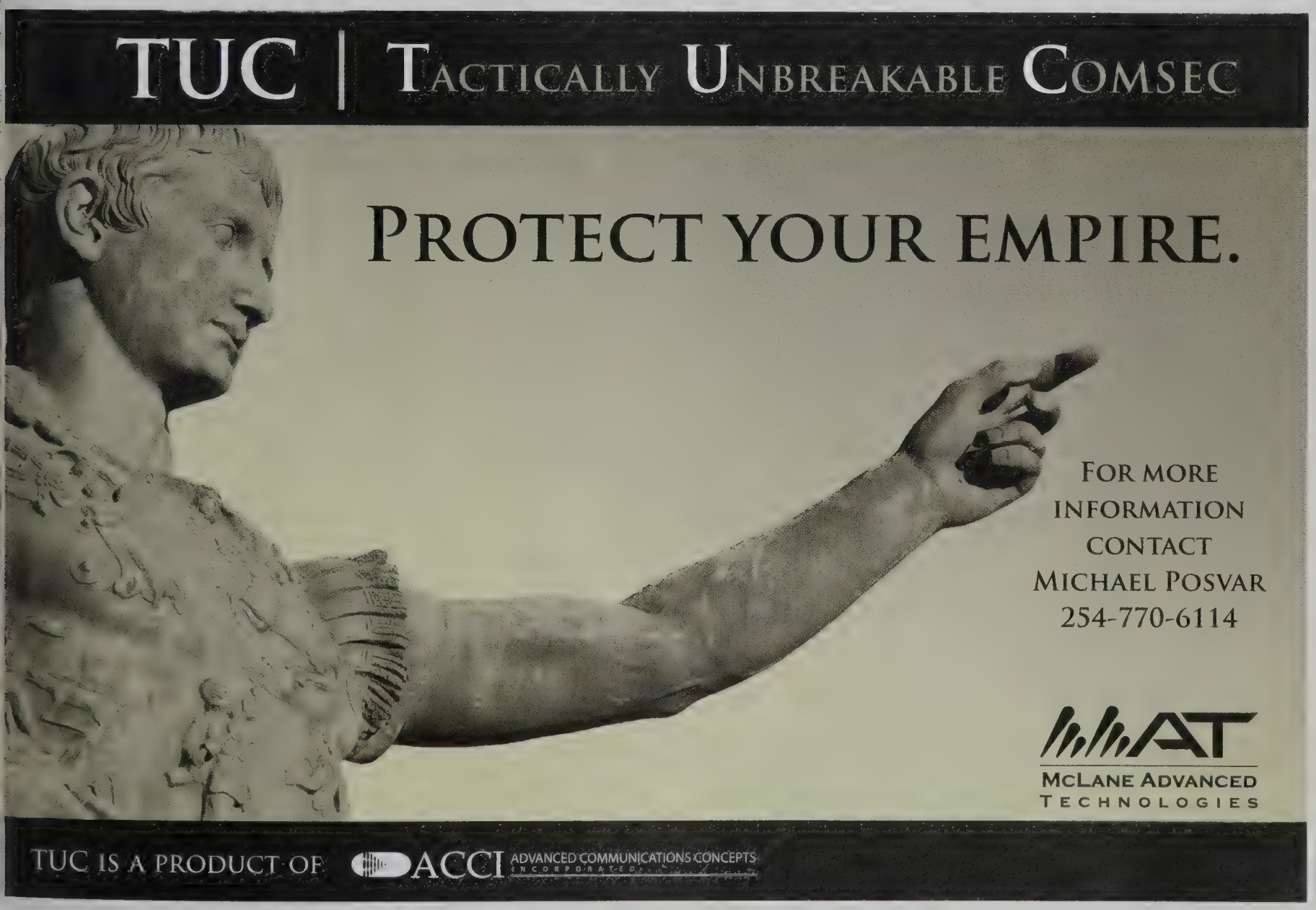
In good units, senior commanders take the time to teach subordinates two levels below their position how to use their initiative within the senior's intent. Then these commanders structure situational training exercises, decision exercises, map board discussions, command post exercises, and other training and learning events so that their subordinate leaders can practice using their initiative.

The constants of change, ambiguity and flexibility have also led commanders to recognize the need for learning in combat. This learning takes place individually and organizationally.

Individually, learning soldiers and leaders fare better than those who think and act only in terms of rote execution of a plan, or "what they've always done." Soldiers and leaders learn from the enemy and the battlefield, and to stay one step ahead of the enemy, they understand that they must constantly review daily events: What did the enemy do today that was different from yesterday? How do I adapt? What did we do today that worked? Why? Will it work tomorrow? Should I adapt? If so, how? These are ever-present questions in the minds of learning soldiers and leaders. In good units, these questions are not only encouraged but shared so that everyone benefits from both questions and answers.

Learning units also fare better. Staffs and sets of subordinate leaders who are able to see and understand what is going on during a battle or between battles and then quickly adapt by translating that understanding into fresh orders or directives demonstrate the organizational dimension of learning. Again, in good units, commanders teach their staffs and teams of leaders how to observe, understand and adapt; they then practice this cycle through a variety of training and learning exercises.

The U.S. Army has a history of individual and organizational learning at the tactical level. The training revolution of the 1970s and the establishment of the combat training centers and the battle command training programs in



the 1980s—the plan-prepare-execute-assess-redo training methodology and after action review process—made the habit of learning nearly automatic in the daily lives of soldiers and leaders. War has proven how useful this methodology and this process are.

The war we are fighting today has proven to be very complex. Soldiers and leaders must conduct their business while being mindful of the operational and strategic context within which they fight and operate. The Army's combat training centers and battle command training program as well as its officer and noncommissioned officer education programs have tried to capture this complexity and add it to the conditions that are already a part of soldiers' training and learning.

Thus we have a third aspect of learning: institutional learning. The Army's institutions—in this case Training and Doctrine Command, primarily, but also Forces Command and the Department of the Army—recognize their responsibility to prepare soldiers, leaders and units for war as it is being fought. According to our training doctrine, mission training plans (MTPs) should govern the daily conduct of training. Because MTPs are so outdated, however, leaders and commanders rarely use them. Rather, leaders rely on best practices—the tactics, techniques and procedures that have worked most recently in war. Of course, all leaders want to capture lessons learned and use these in training. Doing so is right and good and demonstrates, yet again, the extent to which the Army emphasizes learning at both the individual and organizational levels. But there is an institutional downside. Because we have not figured out a way to capture these lessons and publish them as doctrine fast enough to be used, individual and organizational learning has outpaced institutional learning. Furthermore, the gap between learning at the individual and organizational levels and that at the institutional level is significant.

Some institutional learning has kept pace; the combat training centers and the battle command training program provide good examples, and there are others. The training doctrine that is designed to govern the behavior of units—MTPs, tasks, conditions and standards—has not. The claim that "we're a doctrine-based Army" is at risk.

To be fair, those responsible for keeping MTPs up to date have fallen upon hard times in the past decade. Positions and budgets have been cut. Officers, noncommissioned officers and civilians have acted as individual augmentees to the many headquarters and organizations needed to fight the war. Despite these deep cuts, several very important field manuals, including the one governing the Army's training methodology, have been published recently—and this takes organizational energy and focus. While these are very useful in updating how the Army thinks, they are less directly so in affecting how the Army acts. In the past, the Army used mission training plans—and the tasks, conditions and standards they contain—to translate its intellectual doctrine into individual, leader and unit behavior. Absent well written, useful and up-to-date MTPs, that translation will occur via best practices. Leaders have no other choice.

The Army is used to having training developers at each school write a mission training plan. These plans are then integrated by the Combined Arms Center at Fort Leavenworth, Kan. In an environment of relative stability when expert knowledge primarily resided in the schools, this rather lengthy process was satisfactory. In the current environment, one in which soldiers, leaders and units must learn at the speed of war and in which expert knowledge primarily resides in the field, we need a new process.

Perhaps we should adopt an online, collaborative process. We can figure out a way to get unit leaders, the right training developers and school integrators online—either in synchronous sessions or asynchronous, or some combination. Such collaboration has the potential to develop mission training plans as fast as leaders need them.

For example, the engineer company commanders and first sergeants of several Stryker brigade combat teams' engineer companies could gather online—a good portion of them would have just returned from theater, and the Stryker community is practiced at online peer collaboration. Appropriate representatives from the U.S. Army Engineer School, the Combined Arms Center, and the Army and Stryker Centers for Lessons Learned could join them. This group could hammer out the Stryker brigade combat teams' engineer company mission training plan collaboratively. They could publish it immediately online, then update it every six months—just what we need to help training doctrine keep pace with wartime learning.

We have the technology, we have the experience, we have the knowhow and we have the need. Learning at the speed of war applies not only to soldiers, leaders and units—it applies to our institution as well.

LTG JAMES M. DUBIK, USA Ret., is former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.

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NATO Celebrates 60th Anniversary

By GEN Bantz J. Craddock, U.S. Army
and
Col Michael McLaughlin, U.S. Air Force

On April 4, 1949, representatives from 12 European and North American nations met in Washington, D.C., and signed the North Atlantic Treaty, establishing what would come to be the most successful collective security alliance the world has ever known.

That day, the original 12 signatories pledged their determination to "safeguard the freedom, common heritage and civilization of their peoples, founded on the principles of democracy, individual liberty and the rule of law." They further sought to "promote stability and well-being in the North Atlantic area" and resolved "to unite their efforts for collective defense and for the preservation of peace and security." Those precepts remain as valid today as they were in 1949. The continued fervor with which nations seek to join the alliance underscores the enduring merit of its purpose.





The first session of the North Atlantic Council, held in Washington, D.C., on September 17, 1949, established the principles that have guided NATO ever since.

For 60 years, the North Atlantic Treaty Organization (NATO) has been a pillar of strength and force for peace and security in our world. It oversaw the extensive political and economic reconstruction of a European continent devastated by world war. It created an enduring transatlantic community based on common values and ideals. It prevailed in the Cold War, seeing a decades-long conflict come to a peaceful conclusion. It fostered the reunification of Germany, and by increasing membership it has extended democratic values throughout former Warsaw Pact countries in Central and Eastern Europe. It contributed to the resolution of conflict in the Balkans and the reintegration of that region into the whole of Europe.

Today NATO reaches around the globe to collectively confront the security challenges we face. The 21st-century NATO operates at strategic distance to address 21st-century challenges, ensuring our collective security, coping with turbulence in Europe and beyond, and putting in

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GEN BANTZ J. CRADDOCK is the Supreme Allied Commander Europe and commander of U.S. European Command. He deployed as a battalion commander in Operations Desert Shield/Desert Storm and as the commander of U.S. troops in Kosovo. He later served as the senior military assistant to the U.S. Secretary of Defense and as commander of U.S. Southern Command. Col MICHAEL McLAUGHLIN is an Air Force pilot and assistant to GEN Craddock. He is a graduate of the University of Illinois, the Air Command and Staff College, and the Royal Defence College in Brussels, Belgium.



On April 4, 1949, Dean Atcheson, Secretary of State under President Harry S Truman (center), signs the NATO Treaty for the United States.

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Above, the NATO Defence College, inaugurated in 1951 in Paris, was the brainchild of GEN Dwight D. Eisenhower. Right, with the signing of the Paris Agreements, the Federal Republic of Germany is invited to join NATO.

place modern crisis-management capabilities to respond to challenges in an unpredictable world.

While NATO's 60th anniversary gives us occasion to celebrate and reflect on our successful past, it also presents an opportunity to look to the future and to define the role our alliance will have in advancing peace and prosperity in our world. NATO is and will remain an essential forum for member, partner and contact nations to consult on current challenges, assess the evolving security environment and strive for consensus to engage multilaterally in this complex world.

Today's NATO is not our parents' NATO; nor is it our sons and daughters' NATO. We have taken important steps to complete the transformation from a static, reactive alliance focused largely on territorial defense to an expeditionary, flexible one that works with members and partners to deter and defeat the entire spectrum of threats confronting our collective security. Our transformational work is not finished, however; nor will it ever be. The security environment in which we operate is rapidly changing; our approach to engagement must mirror this tempo of change.



In 1950, GEN Eisenhower was appointed NATO's first Supreme Allied Commander Europe (SACEUR).

In this evolving security environment, crisis warning, identification, avoidance, management and resolution are security priorities for all nations. When NATO adopted a crisis-management role at the Brussels Summit in 1994, the alliance operated in a different time—a time of low operational tempo. Today the crisis-response mandate must compete with operational requirements for forces in Afghanistan, the Balkans and Iraq and on the Mediterranean Sea. Yet rapid response in times of crisis remains a critical alliance capability, and the NATO Response Force remains a key instrument of our military posture. Sustained support for this critical NATO crisis-response capability is absolutely essential.

The current global financial crisis presents nations with difficult choices to make in allocating scarce resources. Across the alliance, security demands are on the rise while defense spending is on the decline. We must find new and innovative ways to transform our militaries and deliver increasingly expeditionary capabilities. Commonly owned and operated assets could go a long way toward bringing the alliance the capabilities its needs. In addition, NATO must expand partnership efforts to generate greater effects and realize much-needed efficiencies. NATO and the European Union have 21 common members, are founded on common values and ideals, and have a wide array of complementary capabilities. We must increase our efforts to effectively partner with one another—operationally as well as politically. In the end, we must remember that a proactive approach to security is much less expensive than a reactive one.

As NATO celebrates its 60th anniversary, some will call into question its relevance in the current security environment. Is NATO a Cold War relic, an anachronism that



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President-elect John F. Kennedy visits the NATO Council in Paris on January 7, 1961, as tensions between the United States and the Soviet Union escalate.

should step aside, making way for new organizations to enter into the security arena? It is not: NATO demonstrates its relevance in today's security environment each and every day—on the ground and in the skies above Afghanistan, on the streets of Kosovo, in training centers in Iraq, on the sea throughout the Mediterranean and in the skies over the Baltic states. In these locations and elsewhere, more than 60,000 soldiers, sailors, airmen and marines from more than 40 NATO nations and non-NATO partner nations stand alongside one another confronting today's security challenges. Ours is an alliance that is redefining itself and sha ing the global security environment to safeguard the fr dom of our citizens and increase security around the wor

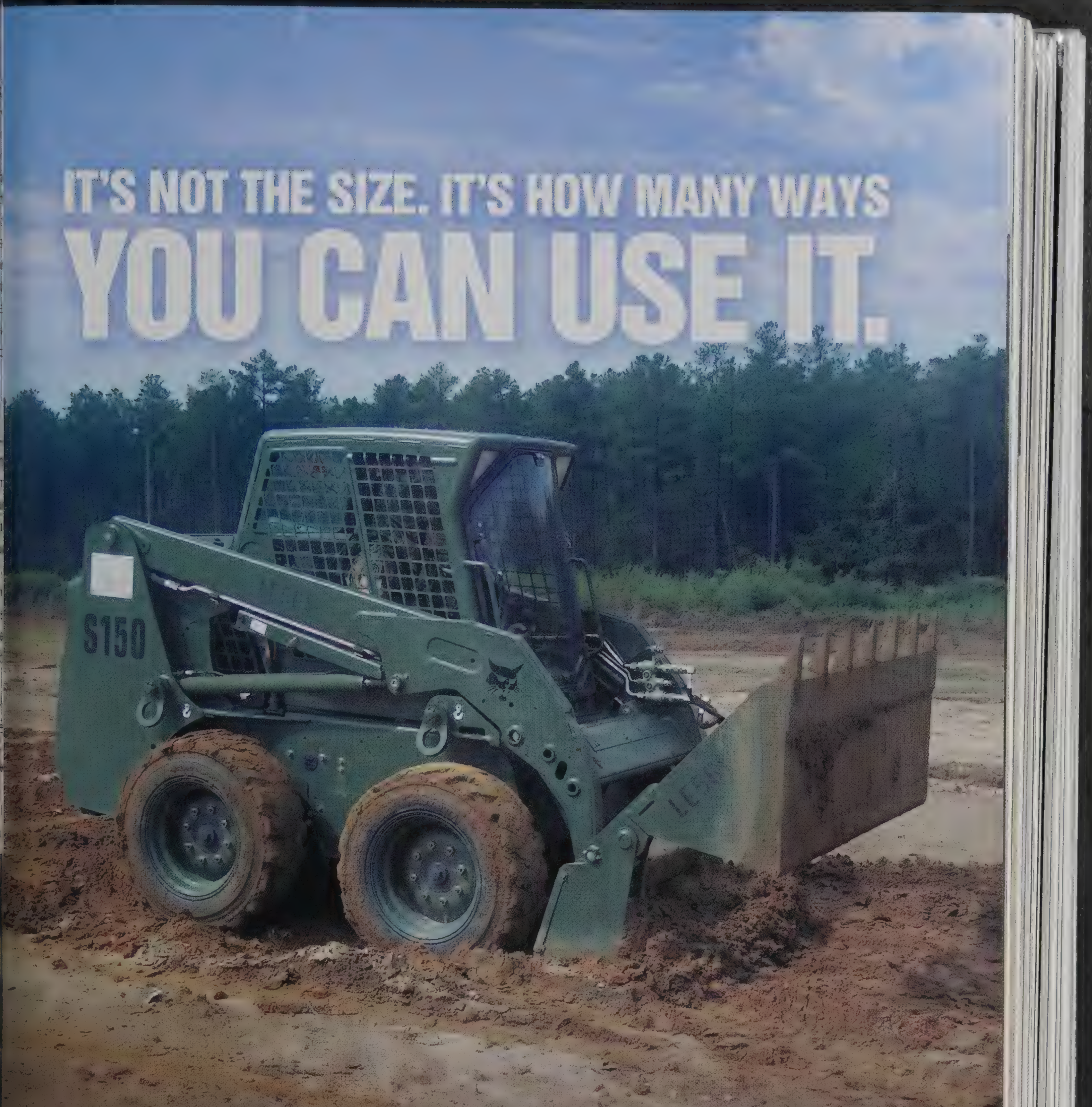
Transnational terrorism, the proliferation of weapons mass destruction, piracy, climate change, energy securi mass migrations and cyber attacks are just a few of t many threats to collective security in our globalized wo that do not stop at national borders and cannot be succe fully addressed by any one nation alone. Today's trans tional challenges necessitate comprehensive internatio solutions, which are made possible only through partn ship, cooperation and dialogue, the very tenets by wh NATO operates. NATO, alongside other cooperative insti tions, is essential to security in our world.

Maintaining an alliance of 26 nations (soon be 28), each with its own national interes consensus and resolution to action, requi effort—sometimes extraordinary effort. The member tions don't always see the threats, or the ways and mea to confront those threats, in the same way. The clear a present danger that was the Soviet Union no longer sta in wait on the other side of the Fulda Gap. Our shared v ues and ideals remain firm and motivate resolution of differences, however. Members recognize that today's curity problems are complex, transcend national bord and demand a cooperative, comprehensive approach t is achieved through constructive debate and dialogue.

Indeed, member nations don't always agree. Not onl this the nature of an alliance, in many ways it is a stren of an alliance. With varying perspectives and a syste consensus, we can be certain our conclusions will be w reasoned, and when we do undertake action, we do with a high degree of legitimacy attached. Disagreemer nothing new; NATO nations have debated, argued a



In 1984, President Ronald Reagan (center left) and NATO Secretary General J. Luns (center right) discuss East-West relations at a meeting of NATO foreign ministers in Washington, D.C.



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President Bill Clinton leads NATO heads of state through the courtyard of the International Trade Center during the NATO 50th Anniversary Summit in Washington in April 1999.



President George W. Bush addresses the NATO summit meeting in Bucharest, Romania, in April 2008. U.K. Prime Minister Gordon Brown is on the President's right.



GEN Bantz J. Craddock, SACEUR

disagreed for decades. The speed and reach of communica tions in the 21st century, however, make the discussion ap pear louder and more profound than it was previously.

Winston Churchill once said, "You can alway count on Americans to do the right thing, a ter they've tried everything else." Charles d Gaulle mirrored the sentiment, saying, "You may be sur that the Americans will commit all the stupidities they ca think of, plus some that are beyond imagination." The neg ative sentiment wasn't exclusively directed at American de Gaulle also said, "When I am right, I get angr Churchill gets angry when he is wrong. So we were ofte angry at each other."

We've had our disagreements: the Suez Crisis during th 1950s, the French military withdrawal from NATO in th '60s, the Soviet invasion of Afghanistan in the '70s, Persh ing II missile fielding as well as the gas pipeline betwee the Soviet Union and Europe in the '80s, the Balkans in th '90s and Iraq in 2003. All have drawn comments that th alliance is irrelevant or on the brink of collapse. This is r truer today than it proved to be at each of those points i history. In disagreement, we have demonstrated our beli in democracy and in the value of intelligent debate, repea edly proving the strength and worth of our alliance. In th face of differences that some purport to be the undoing NATO, the alliance is currently deployed in diverse an demanding operations on three continents. Nations acro Europe are striving for membership, and France is wor ing to renew its relationship, advocating full participatio in alliance structures. These are not indicators of obsole cence or irrelevance, but rather of an alliance that has b come the gold standard for security in our complex worl

NATO is flourishing. For 60 years, the NATO allian has signified peace and prosperity for our members ar partners. Those who preceded us created and sustaine that legacy; it is now our responsibility to do the same f those who follow. In celebrating its 60th anniversary, I co gratulate NATO on its glorious past, its essential prese and its bright future.

Beyond 'An Inconvenient Truth': The Army's March Toward Operational Sustainability

By Addison D. Davis IV
Deputy Assistant Secretary of the Army
(Environment, Safety
and Occupational Health)

Concerns about the future of our planet and climate change—fueled in part by former Vice President Al Gore's film "An Inconvenient Truth"—have placed responsibility for the future of the environment and the health of the planet squarely at our feet. Indeed, Pulitzer Prize-winning author Thomas L. Friedman refers to green as "the new red, white and blue." The Army is poised and prepared to take its place on the front lines to address the future of our environment and to enhance the future of our nation and ultimately the health of soldiers, Army civilians and their families around the globe.



U.S. Army

Above, the 282nd Base Support Battalion in Hohenfels, Germany, exemplifies the Army's commitment to environmental stewardship. Left, a compensatory wetland built at Fort Drum, N.Y., is part of the installation's wetland mitigation bank program to construct, enhance and preserve wetlands.





Office of the Federal Environmental Executive

Winner of a 2008 White House Closing the Circle Award for sustainable design, Fort Bragg, N.C., used 12 reclaimed 14-gauge steel shipping containers (top) to construct a building for the 249th Engineers Company (above).

The reawakening of the green movement domestically and internationally over the past decade is rooted in a widely accepted principle known as *sustainability.* Sustainability is now a globally accepted approach to maintaining economic growth while avoiding harm to our planet or exhaustion of its resources and improving the quality of life for its current and future inhabitants. Practicing sustainability makes good business sense for the private sector—and good operational sense for the Army.

In many respects, the Army sustainability initiative began just short of a decade ago when the sustainable Fort Bragg program was launched in 2001. Since then, goal-driven sustainability programs have been implemented at 30 Army installations throughout the continental United States and in Hawaii and Germany. The initial effort at Fort Bragg was the impetus for both the Army Strategy for the Environment and the more recent release of the Army Sustainability Report.

From the beginning, Army sustainability has proven to be an extremely useful organizing principle that ensures continued access to training lands, availability of materiel, and provision of facilities and services, all of which are necessary to provide trained and ready forces for the Army mission and to support future needs.

Army sustainability is codified in a simple yet powerful "triple bottom line" that includes three key components: mission, environment and community. Mission accomplishment is the true determinant of success or failure within the military. Sustainable ranges and training areas ensure combat readiness through increased training days, while sustainable buildings, facilities and neighborhoods enhance the quality of life for soldiers and their families.

Environmental, safety and health considerations form the foundation of Army sustainability. Clean air and water, abundant natural resources, properly managed wastewater, and solid- and hazardous-waste programs have a positive impact on the overall health of the planet and local ecosystems, and they ensure the health and well-being of soldiers, civilians and their families on installations and in local communities.

The contributions of the military community can have a profound effect on the environment through recycling of household and commercial waste, reduction of consumables, carpooling and other initiatives that reduce unnecessary use of materials. Energy efficiency and water efficiency decrease resource consumption, thus reducing the overall cost of operations, and through sustainable design they lower maintenance costs over the lifetime of our buildings. There is also the community outside the installation fence line, however, where many of our soldiers, civilians and their families reside. Collaborative community efforts can generate enormous economies of scale, saving monetary resources by pooling funds for multiuse projects that support community needs both on and off the installation.

Through sustainability and the application of the triple bottom line, the Army is building green, buying green and going green. The Army is building green to support a sustainable living and working atmosphere. After first adopting the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards in 2006, the Army has raised the bar by requiring that all new military construction meet the LEED silver standard. (This requires earning 33 to 38 points of a possible 69 across six areas.) LEED buildings are high-performance, sustainable buildings that reduce energy consumption significantly, conserve water, and contribute to safe and pleasant surroundings. These green buildings contribute to an improved quality of life for the soldiers, Army civilians and families who occupy them, while reducing cost and supporting a healthy environment.

The Army is buying green to reduce total life-cycle costs, logistics tail and energy bills. New buildings are being stocked with energy-efficient, recyclable green products by using the electronic product environmental assessment tool, ENERGY STAR appliances and green technology. The Stryker Environmental Team made history when it implemented pollution prevention, waste reduction innovations, environmental management systems and environmental regulations into the Stryker acquisition process. The benefit of this approach was twofold: eliminating potential impacts on the environment and avoiding the need to redesign or retrofit the vehicle to address pollution concerns later on.

ADDISON D. DAVIS IV has served as the deputy assistant secretary of the Army (Environment, Safety and Occupational Health) since October 2005. He provides executive leadership for all Army environment, safety and occupational health programs, including Army National Guard and Reserve activities.

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Right, the U.S. Army Tank Automotive Research, Development and Engineering Center's XM1124 hybrid-electric Humvee on an M1113 Humvee chassis is powered by a diesel hybrid with an all-electric drive train.

"Pay attention: when the U.S. Army desegregated, the country really desegregated; when the U.S. Army goes green, the whole country could really go green."

—Thomas Friedman

The New York Times Magazine

The Army is going green, currently testing and developing its first hybrid-electric propulsion system to power the eight new manned ground vehicles for 15 Future Combat Systems brigade combat teams. Using hybrids will reduce reliance on fossil fuels, which in turn will reduce dependence on outside sources of fuel, taking more soldiers and Army civilians out of the line of fire.

Army sustainability is a critical organizing principle that forms the basis of our future. In December 2008, senior uniformed Army leadership set forth the challenge to operationalize sustainability or, to paraphrase Friedman, to integrate sustainability into the very DNA of the Army.

Army sustainability enables us to bring into closer focus the notion of green as a newfound ally in the fight to gain and maintain national and global security. Equally important to understanding the intrinsic value of Army sustainability is its application in an operational context. As an organizing principle, operational sustainability not only mandates the expansion of sustainability on a broader scale throughout the Army, it also establishes enabling capabilities that directly correlate with the Army's four major imperatives: sustain, prepare, reset and transform.

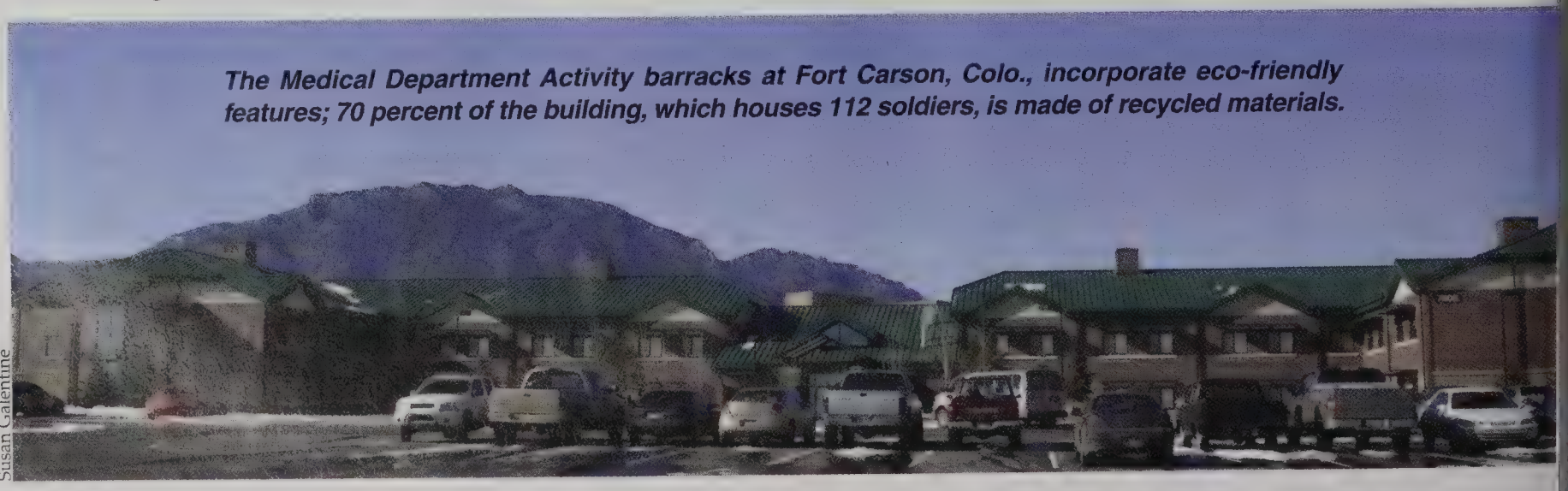
■ Sustain: Ensure ongoing availability of high-quality installations, facilities and services for soldiers and their families through sustainable facility and infrastructure construction and operational methods.

■ Prepare: Deliver a force that is trained and ready for full spectrum operations by enabling realistic, dynamic training landscapes representative of current and future operating environments.

■ Reset: Use sustainable procurement practices to enable readiness through recovery and reset of forces.

■ Transform: Ensure the ability to operate within an environment reflective of the 21st century and beyond, using evolving operational concepts and promoting stability in support of the combatant commands; address the need to engage in stability operations and civil support in environments destabilized by increased competition over decreased access to resources (land, energy, water and so on) and ensure that future systems include sustainability performance metrics.

Operational sustainability extends quite logically to ongo-



The Medical Department Activity barracks at Fort Carson, Colo., incorporate eco-friendly features; 70 percent of the building, which houses 112 soldiers, is made of recycled materials.

Susan Galentine

TRAINING EXPERTS DELIVER WINNING SOLUTION.

MAN-PORTABLE AIRCRAFT SURVIVABILITY EQUIPMENT SYSTEM TRAINER (MAST)



After-action review

Leaders in defense training, AAI and its team of EW experts are designing the most cost-effective and advanced next-generation aircraft survivability equipment trainer. The team's MAST will enable aircrews to develop defensive skills against surface-to-air missile threats and build confidence in combat environments.

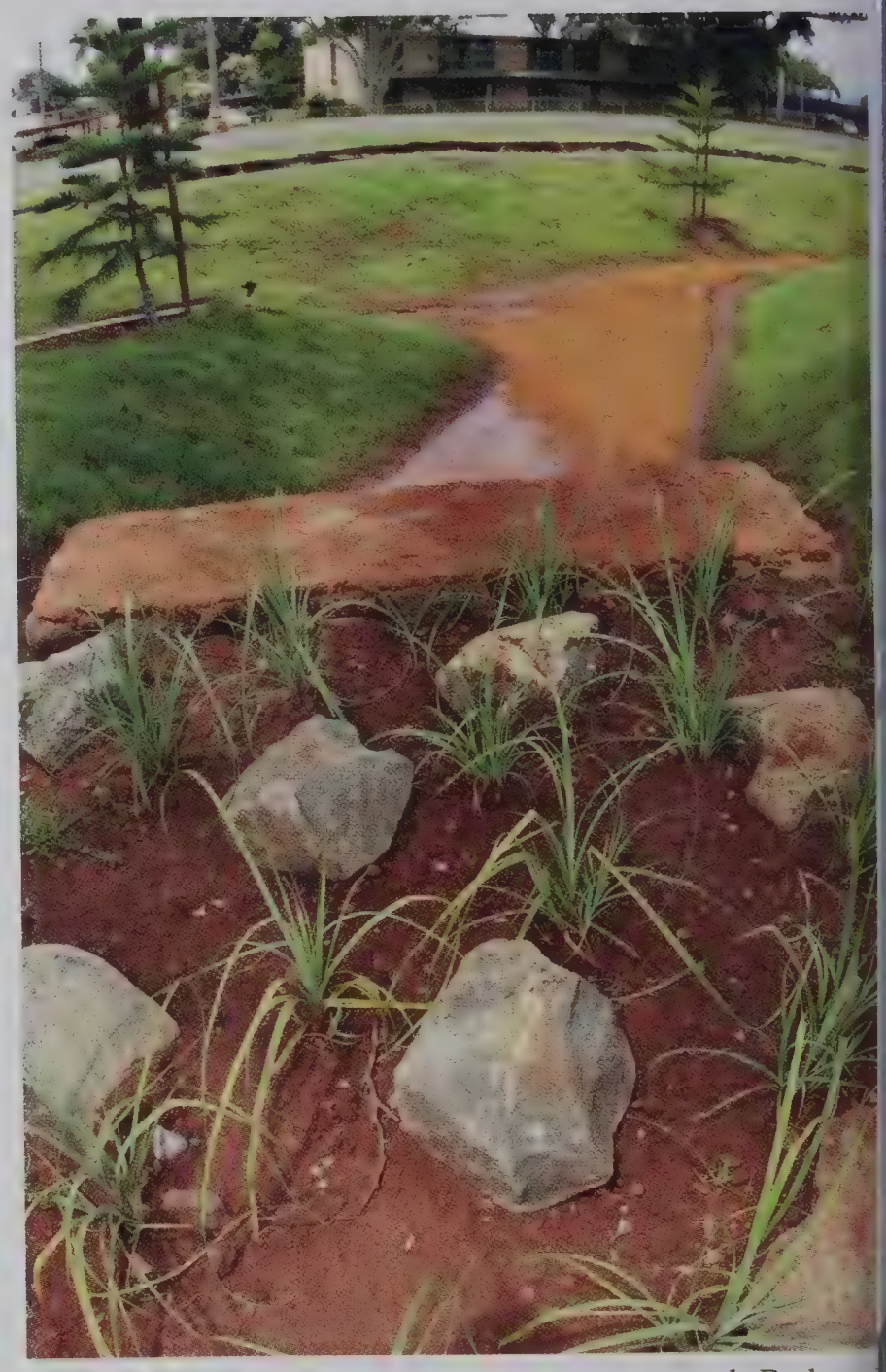
The team is already operating MAST successfully, combining an economical COTS-based architecture with established technologies. The trainer consistently delivers precise stimulation of missile warning systems, replicates the visual effects of SAM missiles, and provides comprehensive after-action video for continuing skills development.

AAI, a premier producer and integrator of EW test and training systems, is partnered with ESL Defence and Inter-Coastal Electronics (ICE). ESL is recognized for world-class EO/IR simulation capabilities. ICE is a top designer of networked telemetry and data acquisition equipment that interface with the Multiple Integrated Laser Engagement System, Air-Ground Engagement System, and Tactical Engagement System.

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AAI



At Schofield Barracks, Hawaii, a bio-swale—natural landscape elements, including native plants and trees—is designed to remove silt and pollution from surface runoff water near Army family housing.

ing and future contingency operations. The Army's predominant status on the battlefield is paramount, and sustainability provides a means for balancing noncombat-related operations that have a real and intense impact on mission success. Applications of sustainability are garnering support and building alliances as the U.S. military continues to employ civil support during post-conflict phases of irregular warfare in austere locations where access to basic resources and services is not guaranteed.

The U.S. Army Corps of Engineers has led the way in balancing quality-of-life infrastructure improvements with sustainable construction. Whether it is the construction of wind farms and micro-hydroelectric power plants in Afghanistan or wastewater treatment plants in Fallujah, Iraq, these projects stabilize the local population in a way that could not have been done using traditional application of force.

Solar-powered streetlights make use of Iraq's most abundant resource to enable the mission of providing civil security. The solar-powered lights help ensure security for the local population with little impact on the environment, while relieving pressure on the fragile electrical grid that Iraqis depend on for basic resources.

Elsewhere, projects like water recycling, conservation programs and experimentation with sustainable base camps decrease the Army's vulnerability to outside natural and human influences. When everything that soldiers consume in theater must be transported to them and subsequent refuse removed for disposal, the dependence on convoys and supply routes poses a constant threat to personnel. Reduced need for water or fuel means less risk of attack.



U.S. Army

Workers weld a hatch beside the sludge-drying beds of a wastewater treatment plant under construction in Fallujah, Iraq. The project is directed by the U.S. Army Corps of Engineers Gulf Region Division.

While the Army's march toward operational sustainability is well under way and has already resulted in some very impressive achievements, much more remains to be accomplished. We are still in the early stages of fully appreciating the true applicability of Army sustainability as an organizing principle. Efforts are currently under way to embed the key principles of Army sustainability into the Army Campaign Plan. The Army is certainly on the move and in many respects is leading the way for others within the federal government. By building green, buying green and going green, the Army is already making a tremendous difference. If fully appreciated and applied, operational sustainability will surely move us even further down the road toward preserving our fragile ecosystem and will significantly assist in preserving the planet for future generations of Americans. ★

Greener is Better

A Sustainable Future For the Army's Home

By LTG Robert Wilson

While today's Army is committed on multiple fronts across the globe, a significantly different effort is under way to ensure the future of the Army's home—the world-class installations, services and resources that soldiers and their families depend on. We are institutionalizing sustainability into Army planning, training, equipping and operations to ensure future capabilities, lower life-cycle costs and conserve resources.

Sustainability, as defined by the Army, is the organizing principle that enables access to the training, materiel and services necessary to provide trained and ready forces required for current and future

Innovative water conservation measures have made Fort Huachuca, Ariz., a model for sustainable water use in a high desert environment.



The Fort Lewis, Wash., Lifestyle Center is part of a pilot program to improve the quality of life of soldiers and their families.

military missions. It is a critical aspect of the Army's mission at home and in theater, yet it is often viewed as a grassroots green initiative or add-on rather than an organizing principle. With that in mind, in December 2008, Vice Chief of Staff of the Army (VCSA) GEN Peter W. Chiarelli challenged us to make sustainability operational throughout the entire Army enterprise.

Together with other Army staff elements, we are developing an Army sustainability campaign plan that will meet the VCSA's intent while supporting the Chief of Staff of the Army's four imperatives. We're adopting an enterprise approach through four lines of operation: readiness, materiel, people, and services and infrastructure. Through this approach, we will move from individual initiatives to an enterprise-wide synchronization of efforts. This will enable us to assess risks and effects across the Army's core enterprise areas and focus our efforts and resources where they will provide the greatest return.

This increased cross-functional awareness of programs and efficiencies will also enable us to leverage successful initiatives and maximize efficiencies. We will develop processes that recognize where minor "up-front" investments will result in lower total life-cycle costs. We will reach out to stakeholders and partners for input and to use their capabilities. We will also develop programs in which soldiers, civilians and family members have a personal commitment to sustainability and are active participants in programs that enhance readiness and extend our operational capabilities. After the Army sustainability campaign plan is issued, commands and activities will develop supporting goals and objectives along with metrics to measure performance and drive resource decisions.

LTG ROBERT WILSON is the assistant chief of staff for Installation Management and commanding general of the Installation Management Command. He previously served as assistant deputy chief of staff, G-3/5/7. LTG Wilson holds a masters's degree from Central Michigan University and is a graduate of the U.S. Army Command and General Staff College and the U.S. Army War College.

Readiness

The 21st-century training mission requires modern vehicles, aircraft, and communications equipment and continued use of all of our available maneuver areas and training ranges. Too often, however, encroachment from surrounding communities has reached our fence line, affecting our ability to conduct realistic training. Migrations of endangered species onto our training lands can also result in restrictions. In these settings, a collaborative approach with local and regional government becomes a national security imperative. The Army compatible use buffer (ACUB) program is one approach, in which we partner with other federal and state agencies or nongovernmental organizations to establish conservation buffers along installation borders. These partnerships preserve high-value habitats and limit incompatible development near our installations. This can maximize essential military training on-post and minimize the need for habitat restrictions. By the end of fiscal year 2008, we protected more than 83,000 acres through ACUBs.

The Army's efforts extend beyond ACUBs. Our sustainable range program helps maximize the capability, availability and accessibility of our ranges and training lands to support soldier readiness. This program is the Army's road map for the design, management and use of our ranges, and it provides policy and guidance for range modernization, day-to-day management, and the repair and maintenance of maneuver lands. It also supports the development of new tools procedures and initiatives to ensure future range capability.

Materiel

On the acquisition front, the system and materiel advances engineered into the Stryker family are worth noting. Each of the 10 Stryker vehicles is built on a common platform of which 70 percent of the major parts are interchangeable. This commonality has significantly enhanced the efficiency and effectiveness of the overall system "greatly reducing both cost and wait time for our units on the ground," said GEN Chiarelli. Our eight Future Combat Systems vehicles will surpass the Stryker achievements in terms of commonality and efficiency.

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U.S. Army

Hazardous materials at Fort Bliss, Texas, are sorted for disposal or recycling at the installation's Sustainability Center.

We are "going green" on procurement by buying bio-based and sustainable products whenever available and at a comparable cost. We are developing a sustainable furniture policy that sets standards for adaptable, recyclable systems with replaceable parts. When feasible, we're buying furnishings from companies with return agreements and working with refurbishing companies to lower life-cycle costs.

We are also making significant gains in hazardous material management. Nearly 60 installations have hazardous material control centers (HMCCs) that consolidate hazardous materials purchases and centrally store and dispense them to users as needed.

The cost savings and environmental benefits of HMCCs are well documented, and an HMCC at a training range provides added convenience to rotations of different units that would otherwise have to bring their own hazardous materials.

People

We will include sustainability principles in updated doctrine, manuals, orders and regulations. We will further inculcate a sustainability ethic in our military and civilian workforce through updated warrior and leader training, training for our acquisition corps and so on. We are establishing sustainability goals in our leader and civilian personnel performance ratings, and we added sustainability categories to the Secretary of the Army 2007 Environmental Awards.

Over the past decade, we have invested in family programs and services, expanding education opportunities, improving facilities and dramatically improving soldier and family housing. The Army family covenant (AFC), introduced in October 2007, expresses the Army's commitment to providing an environment in which families can thrive. AFC's success led to the establishment of the Army community covenant (ACC) in April 2008. ACC is designed to develop and foster effective state and community partnerships with the Army so as to improve quality of life for soldiers and their families. Implemented at the local level, ACC builds community awareness among employers, educators, and civic and business leaders to support the strength, resilience and combat readiness of soldiers and their families.

Services and Infrastructure

The Army has adopted the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) silver rating as our standard for new construction. Facilities built to LEED standards are more energy efficient and have lower life-cycle operating costs. With construction and renovation, we're designing adaptable buildings that can be reconfigured as our space needs evolve. We're also designing the most efficient buildings possible with our available funds, maximizing energy and water conservation using state-of-the-art technologies such as advanced metering systems that allow real-time monitoring of energy and water consumption.

Our installation master plans have incorporated sustainability principles to create walkable communities, better on-post transportation and colocated support services. Whether we're building a new unit headquarters, housing area or



At Hunter Army Airfield, Ga., the Army Corps of Engineers recently replaced aging facilities with modern, energy-efficient buildings, like these new barracks, and a state-of-the-art fitness center.

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SICPS TMSS MEDIUM COMMAND POST SYSTEM

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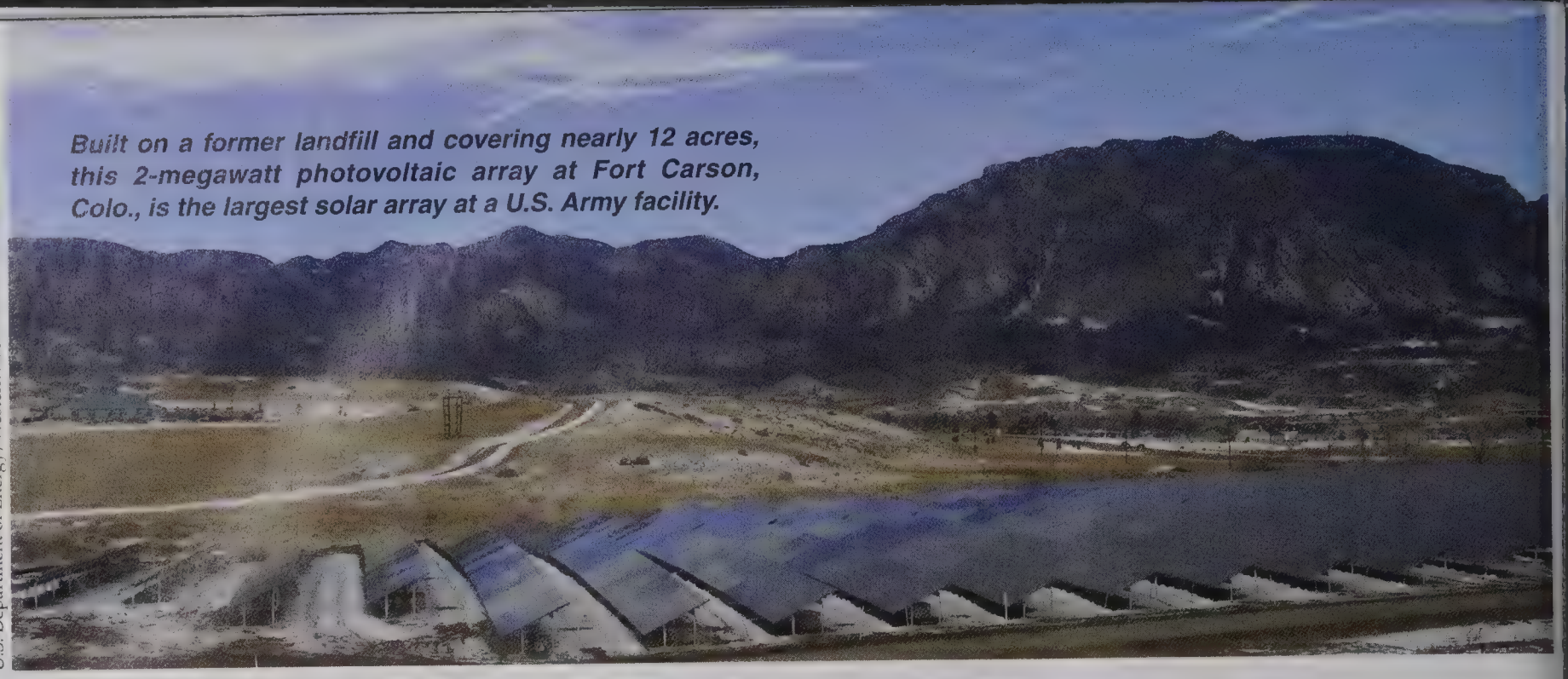
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U.S. Department of Energy/Western Area Power Administration

Built on a former landfill and covering nearly 12 acres, this 2-megawatt photovoltaic array at Fort Carson, Colo., is the largest solar array at a U.S. Army facility.



U.S. Army/C. Todd Lopez

The Army already uses "neighborhood electric vehicles" on many installations and plans to lease 4,000 more of them to replace petroleum-fueled vehicles.

lifestyle center, we're making services more accessible. Colocating the chapel, library, youth services buildings, and commissaries or post exchanges adjacent to the barracks or family housing makes life easier for soldiers and their families.

Affordable, quality housing is a significant factor in retention and readiness. By the end of 2009, we will have privatized 44 locations (more than 88,000 homes) using the residential communities initiative (RCI). These communities provide safe, attractive, modern residences for soldiers and families. Our RCI partners are incorporating sustainable design features such as day-lighting, solar panels, heat pumps and water-conserving fixtures to improve overall efficiency and reduce resource demands.

We're also upgrading 1,200 unaccompanied-personnel housing units and introducing more than 30,000 new and renovated barracks spaces. These buildings will meet LEED silver standards, providing greater efficiency with lower life-cycle operating costs. Recent whole barracks renewal projects at Fort Lewis, Wash., reduced potable water use by 30 percent and exceeded industry heating and air-conditioning efficiency standards by 15 to 35 percent.

We're not just focusing on more efficient buildings. We're investing in on-post renewable energy production to meet our energy security needs with more reliable, locally produced energy. At Fort Carson, Colo., a photovoltaic solar array built on a closed landfill supplies electricity to 540 homes. Two wind turbines operate near Camp Williams, Utah, south of Salt Lake City, and we'll build even more wind turbines in the near future. Fort Irwin, Calif., is establishing an enhanced use lease to construct a concentrating solar-thermal electric plant to enhance on-post energy security and supply excess capacity to the grid.

The Army is also investing in energy-efficient and renewable-fuels fleet vehicles. More than 70 percent of the nontactical fleet at Fort Leonard Wood, Mo., use biodiesel or ethanol fuels. The U.S. Army Materiel Command was an early user of neighborhood electric vehicles (NEVs) for transport across depots. Many other installations have acquired NEVs, such as Fort Irwin, with more than 120 NEVs. The Secretary of the Army recently announced plans to lease an additional 4,000 NEVs to replace petroleum-fueled vehicles on installations.

As our installations adapt to meet Base Realignment and Closure, global defense posture realignment and grow the Army requirements, we will continue to examine every aspect of our operations and implement changes where they are needed. The decisions and investments we make today guided by sustainability principles will ensure that our soldiers have the best training available and that they and their families have the quality of life they deserve for their commitment and service to the Army and the nation. ★

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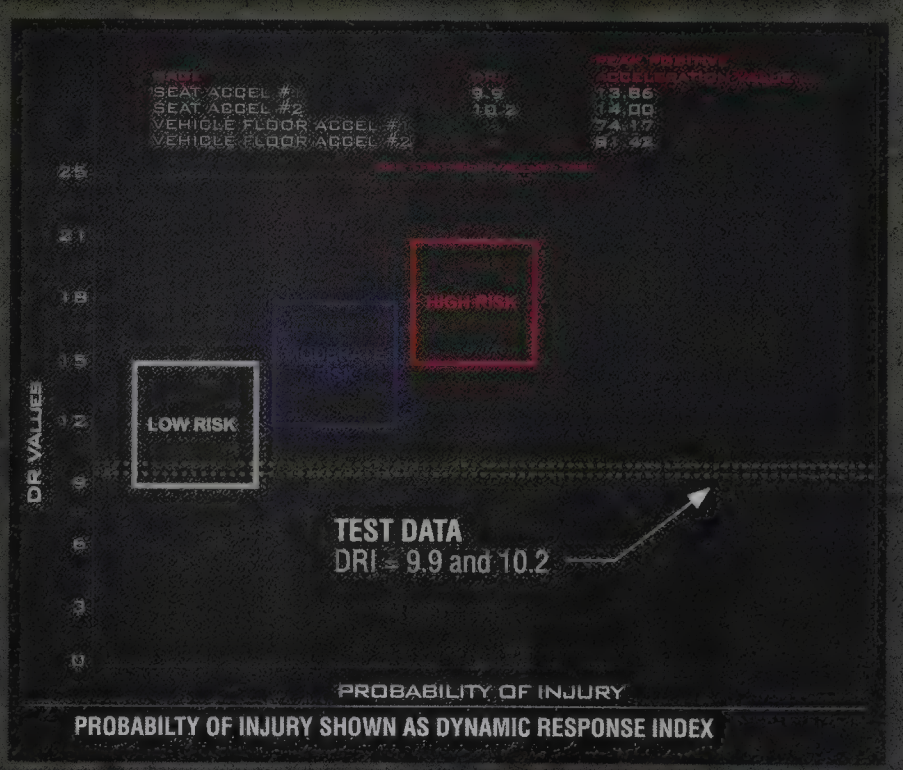
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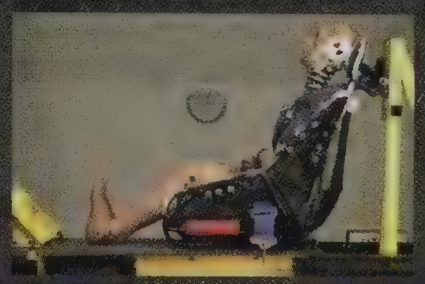


PROBABILTY OF INJURY SHOWN AS DYNAMIC RESPONSE INDEX

SAFETY IN MOTION





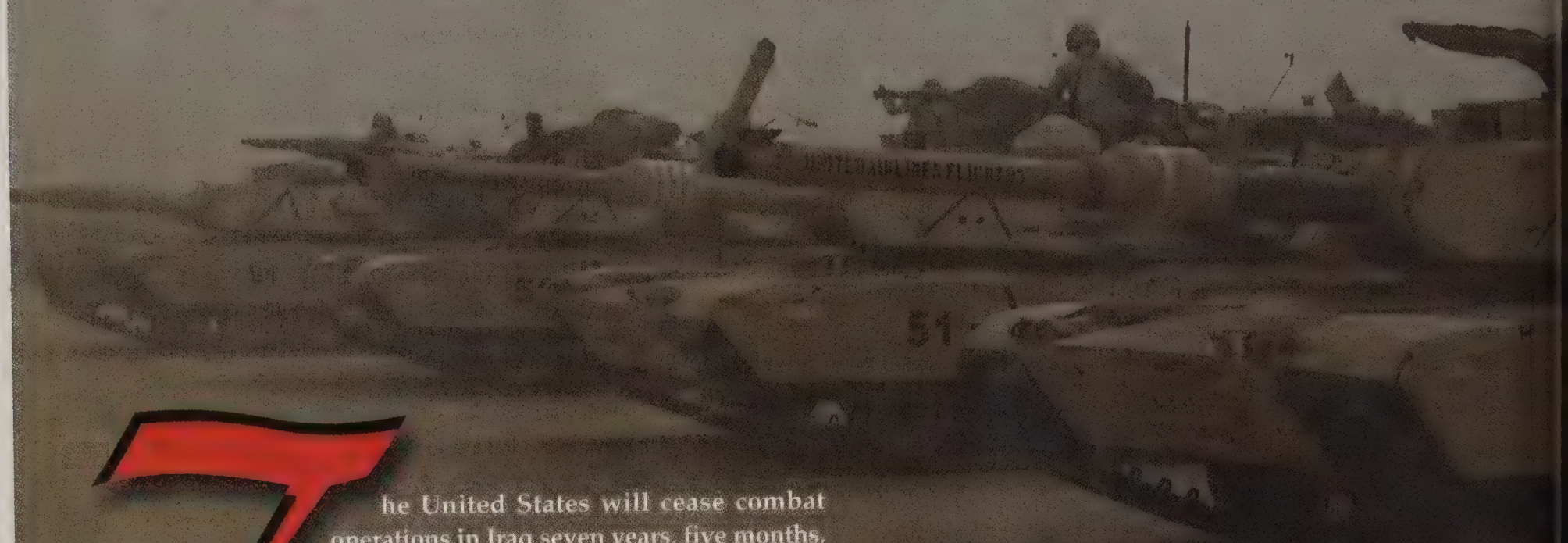


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Iraq: A PARADE



The United States will cease combat operations in Iraq seven years, five months, one week, three days and around 22 hours after the start of Operation Iraqi Freedom (2:34 A.M., March 20, 2003). Or, as President Obama said in February at Camp Lejeune, N.C., "By August 31, 2010, our combat mission in Iraq will end."

"We cannot rid Iraq of all who oppose America or sympathize with our adversaries," the President said. "We cannot police Iraq's streets until they are completely safe, nor stay until Iraq's union is perfected. We cannot sustain indefinitely a commitment that has put a strain on our military and will cost the American people nearly a trillion dollars. America's men and women in uniform have fought block by block, province by province, year after year, to give the Iraqis this chance to choose a better future. Now, we must ask the Iraqi people to seize it."

The President's statement chiseled a conclusion on the war, but maybe not an end. When he announced the combat end date and a concurrent reduction of about two-thirds of the current U.S. military strength in Iraq (from 146,000 to between 35,000 and 50,000), President Obama also said, "Under the Status of Forces Agreement with the Iraqi government, I intend to remove all U.S. troops from Iraq by the end of 2011."

He employed the emphatic term *will* to set the withdrawal and mission change, but the caveat term *intend* when referring to the December 31, 2011, date set by a U.S.-Iraq security agreement, which the United States *must* honor, absent a future pact. There was wiggle room—slight and cramped, but there nonetheless.

In November 2008, the Bush administration signed two compacts, an overarching strategic framework agreement that defines the broader strategic relationship between the United States and Iraq and an accompanying security agreement that set the specific terms for U.S. military presence and for its withdrawal. The latter is the so-called status of forces agreement (SOFA), provisions of which, including the withdrawal date, can be amended by mutual agreement of both parties. The 200

Abrams tanks from the 3rd Infantry Division (Mechanized) line up at an assembly area in Kuwait just hours before the launch of Operation Iraqi Freedom on March 20, 2003.

By Dennis Steele
Senior Staff Writer

DELAYED

Dennis Steele

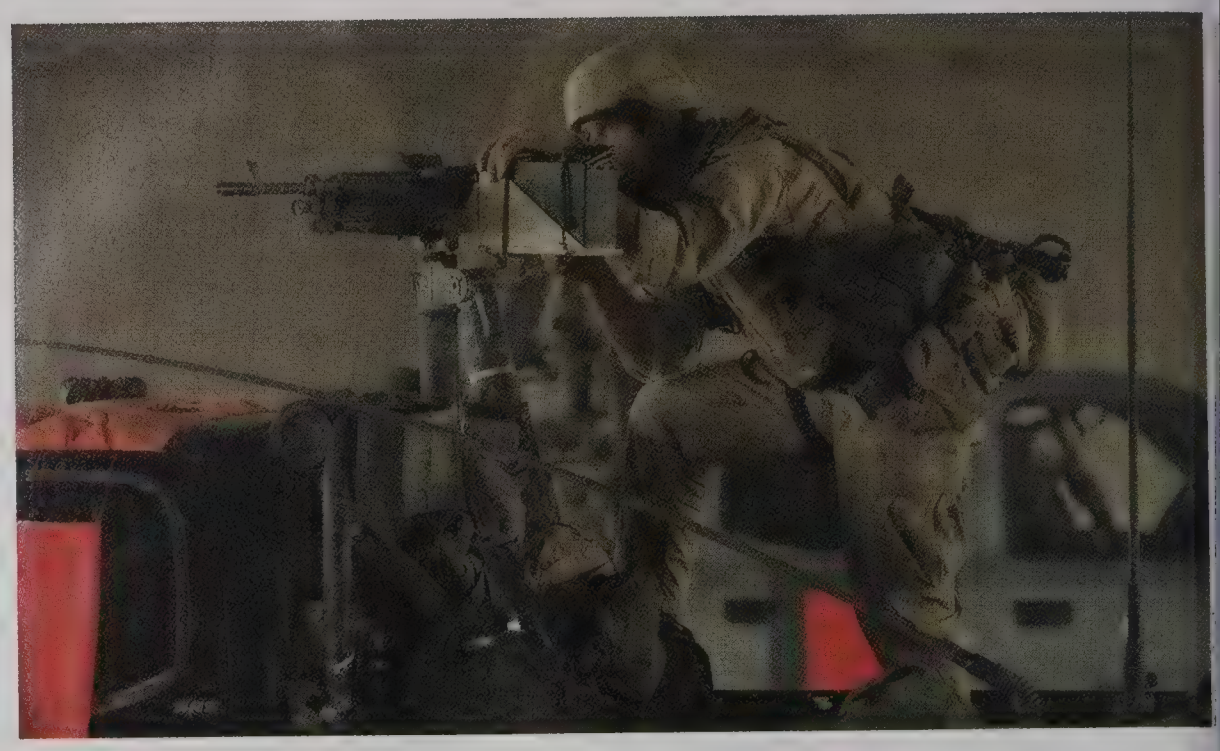
SOFA was a two-year, stopgap agreement with a withdrawal date that allows a period for the next Iraqi government to initiate negotiations for an amended or new SOFA. (National elections will be held in Iraq in late 2009.)

The agreements were signed as time was running out on the U.N. mandate sanctioning the U.S. military operations in Iraq. After protracted negotiations by its signatories, the SOFA gave Iraq what it wanted most: more authority and the trappings of sovereignty over American military action—in the view of Iraqis, respect. The United States chiefly settled for what it needed most: breathing room.

The 35,000 to 50,000 U.S. troops remaining in Iraq after August 31, 2010—to be called a transition force—might be the Obama administration's "show cards" for future negotiations in terms of the number of troops the United States is willing to commit and the job they will be allowed to perform. So far, Iraq has shown no sign of asking us to stay.

Reorganized, refocused and, in wonk-speak, "re-missioned," the transition force primarily will serve as advisers, equippers and trainers under President Obama's plan. U.S. officials admit that ceasing combat operations will not mean the end of U.S. casualties in Iraq. Combat may be over, but the war isn't.

U.S. special operations forces will continue combined operations to eliminate terrorist cells in Iraq, and the transition force will continue to face many of the dangers that combat forces have faced.



A Special Forces soldier takes position to provide cover fire during a battle to take Baghdad.

The plan is a compromise to President Obama's stated campaign promise to have all U.S. forces out of Iraq within 16 months.

"I have listened to my Secretary of Defense, the Joint Chiefs of Staff and commanders on the ground. We have acted with careful consideration of events on the ground; with respect for the security agreements between the United States and Iraq; and with a critical recognition that the long-term solution in Iraq must be political—not military. Because the most important decisions that have to be made about Iraq's future must now be made by Iraqis," the President said at Camp Lejeune.

The announcement telegraphed that Obama, as President of the United States, had listened to recommendations and opposing views and would live up to his late-game promise to take "responsible" action in Iraq, that he would be a reasonable Commander in Chief. The compromise plan ensured that the President's announcement would not result in a clear U.S. domestic political victory for either the stay-the-course or the get-out-now ends of the political spectrum, though it left room for optimism on both sides.

At the outset, the plan was received more positively by Republicans in Congress than the Democratic congressional leadership. Opponents on one side say that the plan does not go far enough—that the only acceptable number of American troops left after a "withdrawal" is zero. Opponents on the other side contend that it takes too many risks, jeopardizing gains that have been hard-won in Iraq.

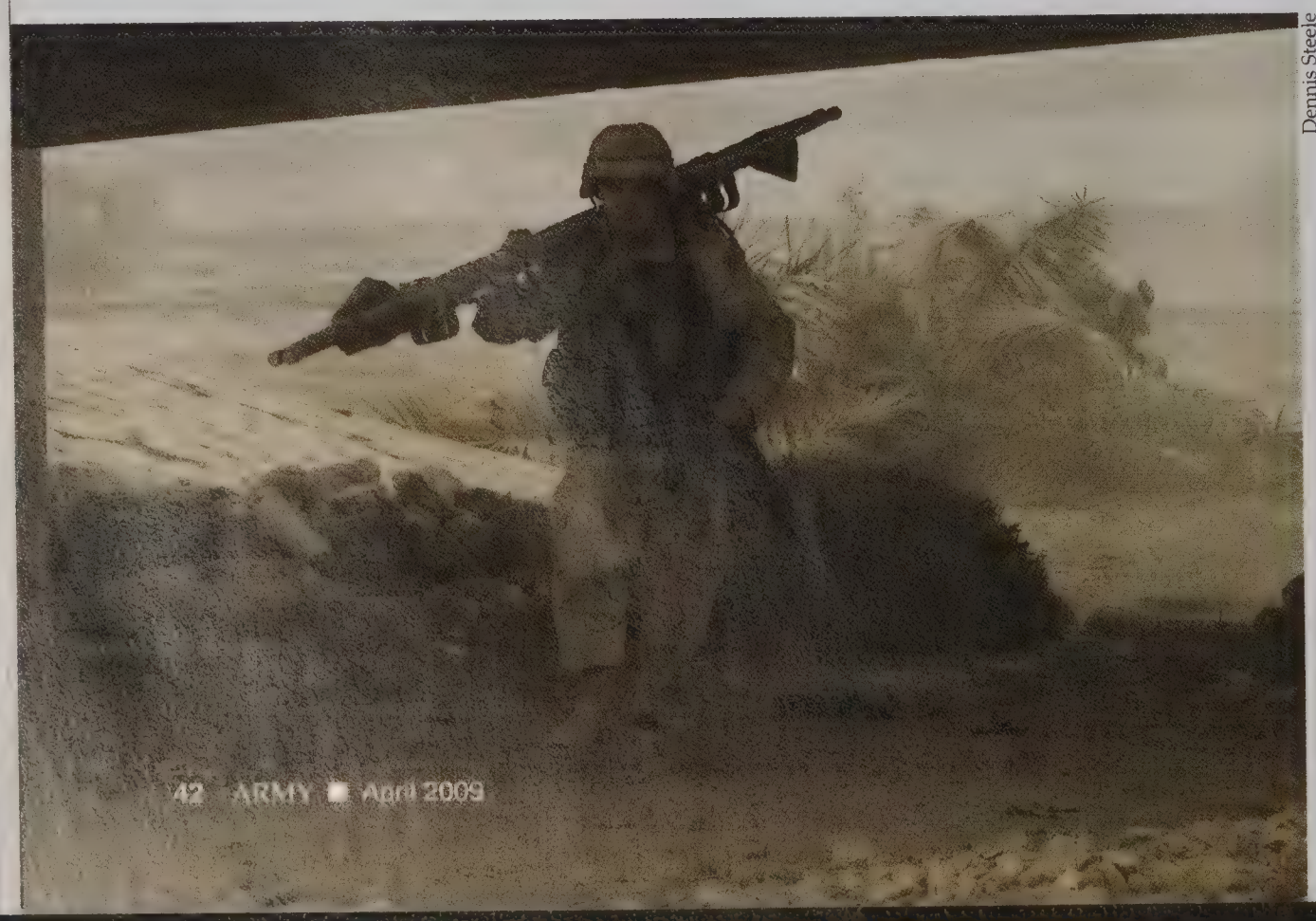
The contemporary wisdom that the only thing worse for the United States than staying in Iraq is leaving Iraq has merit. It is difficult for anyone who has not been to Iraq to understand the corresponding dichotomy at work there—just how much many Iraqis really do not want us there but at the same time fear the consequences of our departure.

Only the future will prove whether this is a bad, good or good-enough plan. Most sober reflections allow that "good enough" in Iraq is the best that the United States can hope for after a certain point, and that for a couple of years it looked like the United States would not even get close to that mark.

In shaping the plan, President Obama sided with military leaders' recommendations in some respects, but not all. "I think that, if the commanders had complete say in this matter, they would have preferred that the combat mission not end until the end of 2010," Secretary of Defense Robert M. Gates said on NBC's "Meet the Press." Secretary Gates described the new policy as a product of frank discussions among the President, members of his administration, the Joint Chiefs and military commanders on the ground.

It was reported that the military leadership offered three options: a 16-month plan (in line with the President's campaign promise), a 19-month plan that held fewer risks and a 23-month plan that presented the fewest risks. The President chose the 19-month plan.

The 19-month plan meets the primary concern held by GEN Raymond



Dennis Steele

A soldier from the 3rd Battalion, 15th Infantry Regiment (3-15 Infantry), 3rd Infantry Division, brings a litter forward during the battle to secure Objective Curley, April 7, 2003.

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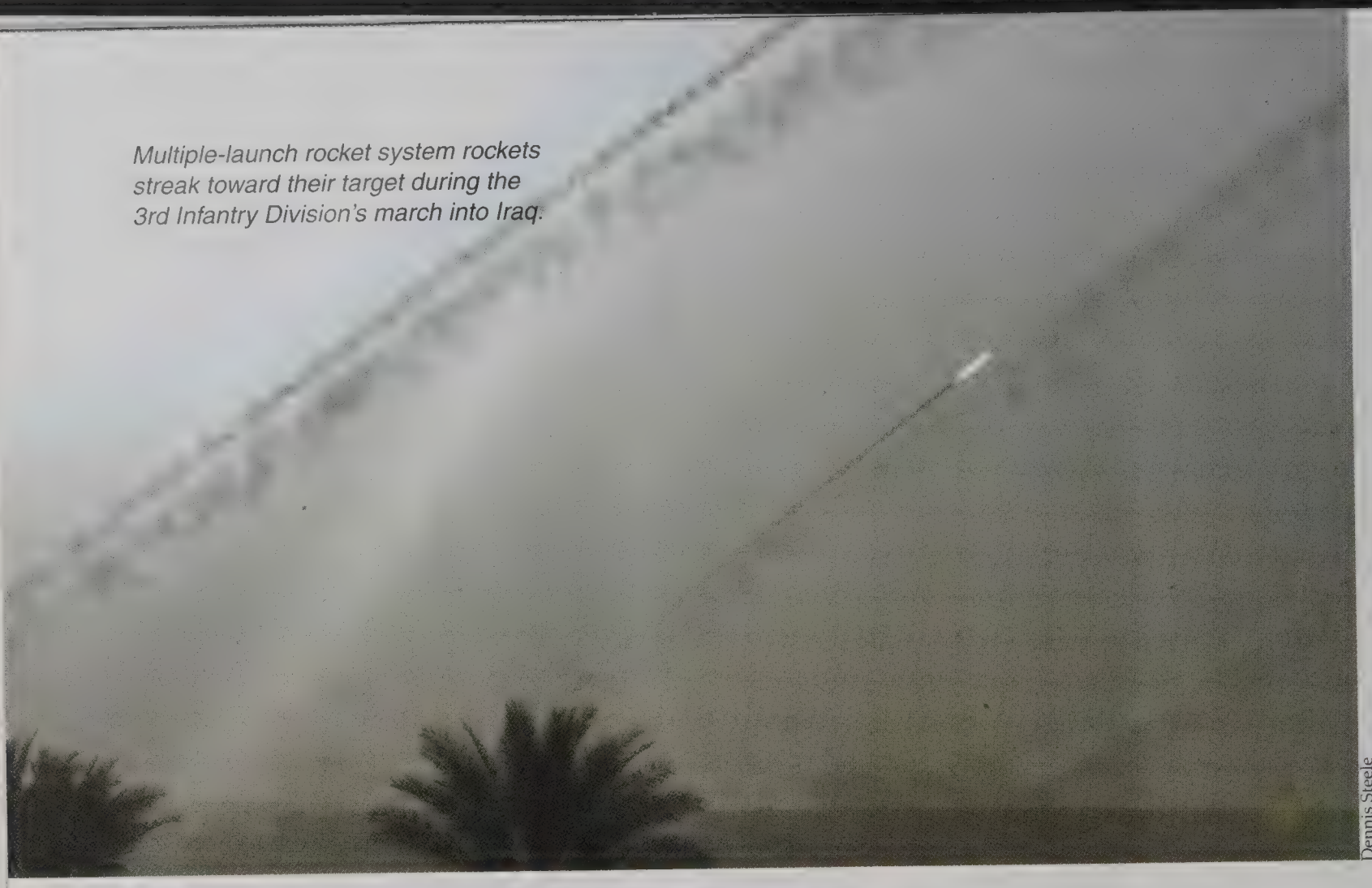
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Multiple-launch rocket system rockets streak toward their target during the 3rd Infantry Division's march into Iraq.

Dennis Steele



Then-CPT (Dr.) Erik Schobitz, battalion surgeon for 3-15 Infantry, treats a wounded soldier during the battle for Objective Curley.

T. Odierno, commander of Multi-National Force-Iraq, which was having enough forces to back up Iraqi security forces during the upcoming Iraqi national elections. To keep those forces in Iraq, the drawdown will be back-loaded. The bulk of U.S. forces will not be withdrawn until after the elections, required under the Iraqi constitution to be held by December 2009.

GEN Odierno does not appear to believe that there will be an extension of the U.S. commitment beyond 2011. "I think [that] the two-and-a-half- to three-year time period we have left is just about the right time period for us [and] for Iraq to exercise its full sovereignty," he said during a Fox News interview, adding, "And it's time for us to go."



Dennis Steele



A 3-15 Infantry soldier looks for enemy rocket-propelled grenade (RPG) teams who were skipping RPGs under the cover of an overpass during Objective Curley fighting.

Dennis Steele

GEN Odierno explained the heart of the plan in an open letter to his troops:

> After extensive consultation with Iraqis, U.S. military chain of command and civilian leaders, the President announced his plan for the responsible drawdown of U.S. forces in Iraq and the continued development of a partnership between our two nations. In accordance with the Security Agreement and Strategic Framework Agreement, the President has provided clear guidance regarding the change of mission for our forces, and his plan provides significant flexibility to military commanders on the ground to implement this guidance.
>
> Our Joint Campaign Plan sets out how we are transitioning from a primary focus on population security to one focused on building Iraqi capacity to achieve sustainable stability. Following an initial drawdown over the next six months, our forces will remain at a robust level through the critical time leading up to and immediately following Iraq's national elections in late 2009/early 2010. As of 31 August 2010 our combat mission in Iraq will end. U.S. forces will be composed of a transition force that consists of a single headquarters, several advisory and assistance brigades, and appropriate supporting forces. The mission of our transition force will be to train, equip and advise professional Iraqi security forces; to conduct coordinated counterterrorism missions; and to protect our ongoing civilian and military efforts within Iraq.



Dennis Steele

The initial drawdown that GEN Odierno referenced will be two brigade combat teams that will leave by September.

It is expected that the last combat brigades to be withdrawn will be from three areas in northern Iraq: Mosul, which is experiencing a large measure of continued violence and is considered to be the last refuge of al Qaeda in Iraq; Diyala Province, which also continues to be hit by violence; and Kirkuk, which is a point of contention between

Soldiers from 3-15 Infantry's mortar platoon reinforce the perimeter at Objective Curley.



A gunner from the 3-15 Infantry scout platoon lets loose a grenade burst to back off an enemy assault.

Dennis Steele

Iraqi Kurds and Iraqi Arabs. A major U.S.-backed/Iraqi-led operation called Operation New Hope was launched in northern Iraq in late February to attack the last remaining strongholds of al Qaeda terrorists and other insurgents.

Some U.S. forces will move south to take over areas from British units this summer as the United Kingdom completes a total withdrawal from Iraq.

Details have not yet been made public about how the advisory and assistance brigades (AABs) will be structured, whether the change will simply entail repainting the sign in front of a standard brigade combat team or whether substantial changes will be made to the formation itself. It is not known if they will be new formations, created from scratch, or an expanded collection of the military transition teams and police transition teams currently operating in Iraq. Nevertheless, the transition force will still need to secure its bases and lines of communications, the same as today's combat force, and it also will need an appropriate logistical, medical, route clearance and aviation support infrastructure.

The transition force is expected to be based at Balad and Taji Air Bases. Camp Victory, adjacent to Baghdad International Airport in southern Baghdad, will continue to have an important role.

The numbers involved in the drawdown are massive. Not only will about 100,000 uniformed personnel have to be redeployed (most in the first six months of 2010), a proportionate percentage of the 39,000 U.S. civilian contractors assisting them also will need to be redeployed, along with a large percentage of the approximately 70,000 third-country contractor service personnel in Iraq. It is hard to fathom the amount of equipment, weapons and munitions, and the number of vehicles that will go.

Left behind will be the structures that have been built or improved, of course, probably along with most, if not all, of the tens of thousands of individual housing units (trailer and container units). Also staying will be the many thousand T-walls and other concrete barriers, which will likely be the longest-lasting signs of the American presence. (Although Iraq is mostly desert, the sand there is not especially good for making American standard concrete, so even sand—mountains of it—had to be hauled into Iraq for the U.S. effort.)

Most of the people and material involved in the war en-



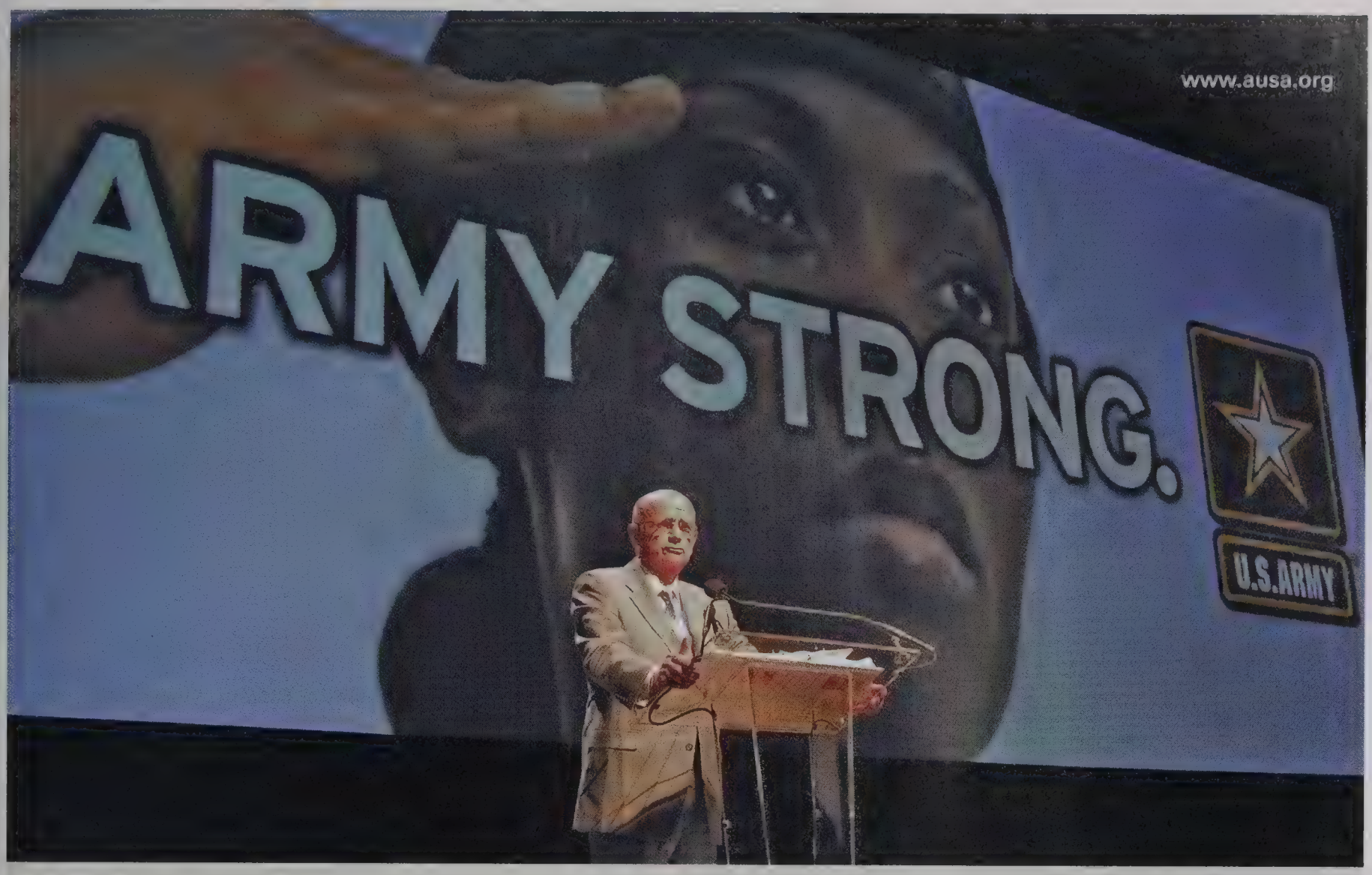
PFC Jose Segovia, 1st Cavalry Division, searches a rooftop during an operation in Mosul, Iraq, in March 2009. Insurgents and terrorists still have a foothold in Mosul after retreating from other areas.

SSG JoAnn Makinano



PFC Marc Capo, 1st Battalion, 2nd Infantry Regiment (attached to the 1st Stryker Brigade Combat Team, 25th Infantry Division), provides security at a checkpoint in Diyala Province, Iraq, in February 2009.

PO2 Walter Pels



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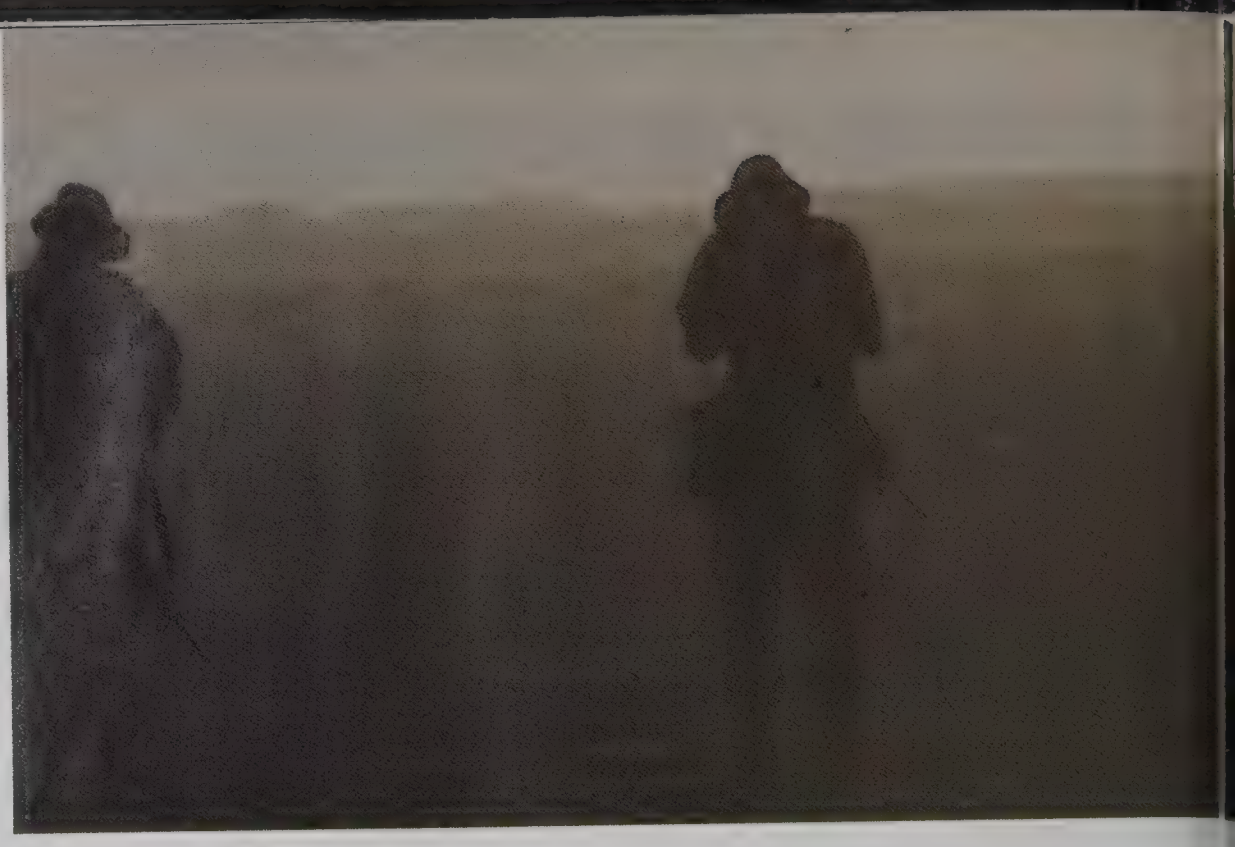
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Soldiers from the 2nd Brigade, 3rd Infantry Division, return to their vehicles after receiving a preinvasion briefing at a Kuwaiti assembly area before the start of Operation Iraqi Freedom.

Soldiers look for signs of the enemy as they clear a village outside Baghdad in 2003.



Dennis Steele

tered Iraq from Kuwait; however, additional routes west to Jordanian ports and north to Turkish ports are being tested or prepared.

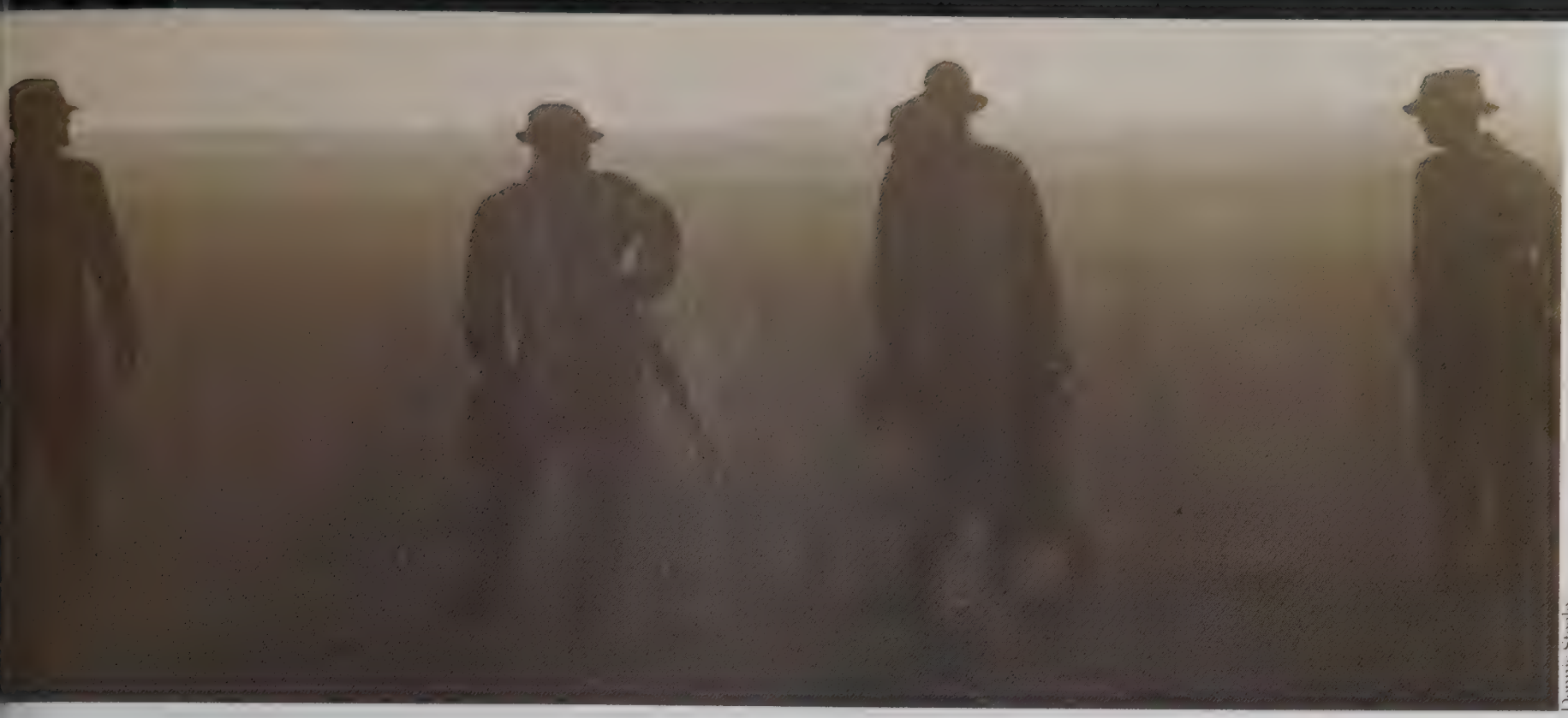
Under the 2008 security agreement, U.S. forces are required to be out of Iraqi cities in June, meaning the closing of smaller forward operating bases and combat patrol bases that were established in urban neighborhoods to secure them. About 74 such bases have been handed over to Iraqi security forces, and responsibility for the Green Zone also has been handed over to the Iraqis. Meanwhile, U.S. forces are adjusting to a slew of operational restraints and requirements imposed by the SOFA.

Violence in Iraq dropped to a six-year low in February, reaching an ebb point not experienced since August 2003. While there have been spikes, overall violence—against both Iraqis and American troops—has been declining since the surge and a new counterinsurgency (COIN) strategy gained traction in 2007.

Contemporary views tend to simplify things and attribute success and improvement to what they know as the surge—and make no mistake, the troop influx that gave commanders the capability to both clear and hold ground along with the COIN tactics of protecting the Iraqi people did save Baghdad, and if Baghdad had been lost, Iraq itself would have been lost. Indeed, a precipice was in sight, and Iraq was headed over the edge. There was a boiling civil war—rather one-sided in that the better organized militias of the Shias had done a good job in systematically killing, terrorizing and displacing Baghdad's Sunni population during the previous year and a half and were on the verge of completing the job.

Yes, Sunnis were striking back as viciously as they could, but they probably would have been rolled over in another few months. Yes, factions of the foreign al Qaeda and al Qaeda in Mesopotamia were nearly running wild, murdering and terrorizing Iraqis as they pleased and killing American soldiers in scores. And, yes, the surge and associated actions systematically ended the Baghdad conflagration and moved outward from the city, stomping as it went, so those actions deserve the praise they get. The





Dennis Steele

ncredible jobs performed at individual field command evels and by individual soldiers carrying out the mission deserve more credit than they get. The strategies were conceived in the lofty environs of the headquarters; the campaign was won at the platoon level.

Other factors contributed—ones that seem to be less mixed into the equation as time passes. First was the Sunni "awakening" in the west and the tribal turn against al Qaeda—a real success story. Second was putting downright nsurgents and thugs on the payroll—essentially paying hem not to kill their fellow Iraqis (and especially not to kill American soldiers) and stay out of the way. Third, the Shias stopped fighting. Their leaders issued a ceasefire for two reasons: The risk/reward factor tipped too far to the risk side n the face of the American influx and renewed aggressiveness, and the Shias had largely achieved their major aims, already gaining most of what they wanted before the surge hit shore. Finally, former Secretary of Defense Donald H. Rumsfeld left office. No field commander could have had much success under a micromanaging, misguided chokehold on American efforts from the Pentagon. That's the factor most people likely want to overlook. It may be unpleasant, but hat doesn't make it less true. (President Bush's willingness o entrust the tack to GEN David H. Petraeus and Secretary Gates' light hand on the tiller *did* contribute to success.)



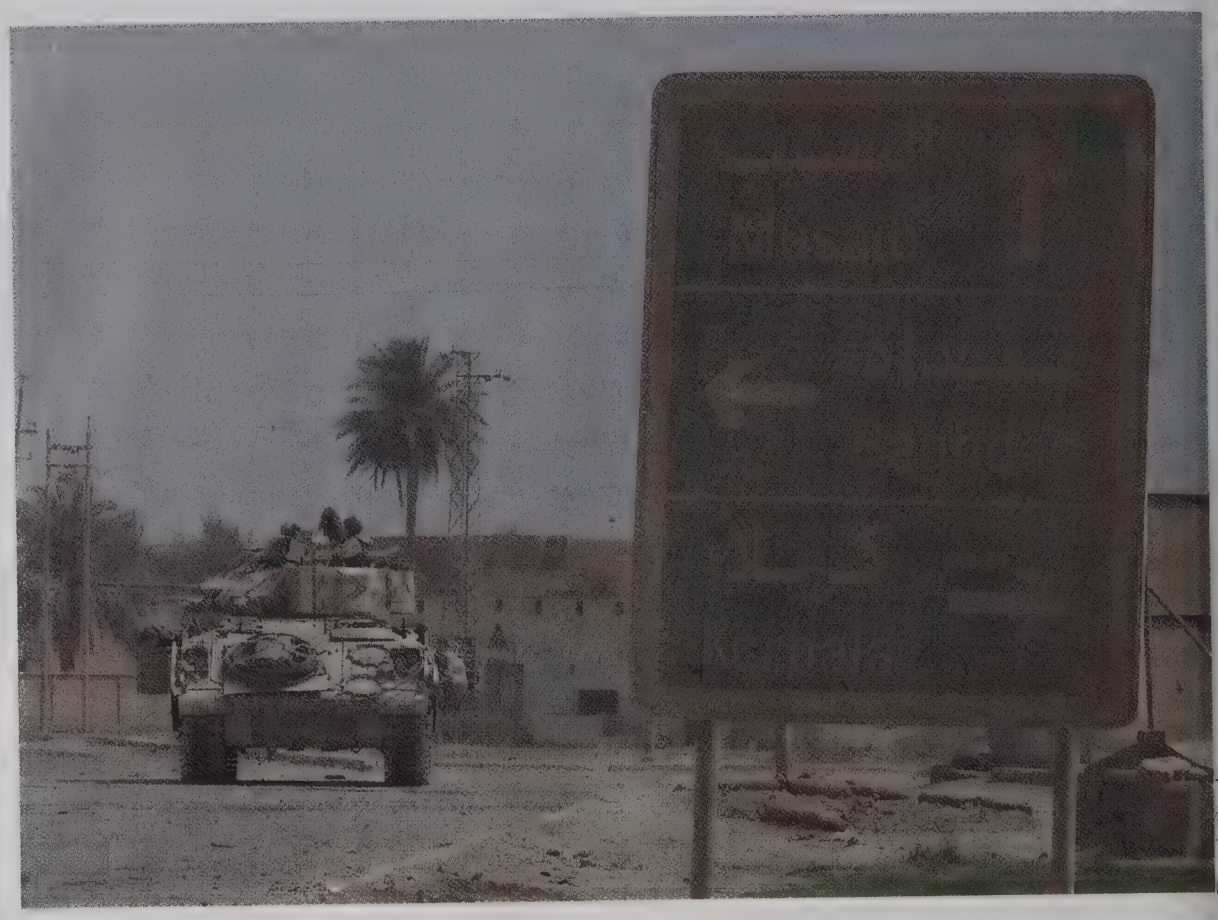
Dennis Steele

Despite the present lull, several doomsday scenarios in Iraq are still possible; a couple of them are even probable to some degree. The second general election in a newly established government is often more violent than the first, and such is the likelihood in Iraq. The first time around, the process is rather intimidating and exciting, and nobody really knows what to expect. The second time, people have gained a grasp on what political power means. Many of them want it; many don't want others to get it.

In addition, the foundation remains for a sectarian war. Sunni and Shia strife has lasted more than a thousand years. It's not going away, and the fault line runs through Iraq. These are boilerplate facts. The trouble is not seated in the farther reaches of history; the real trouble is that one side or the other could seek payback for what happened two years ago, and violence could escalate from a mere spark. Potentially, that is the most dangerous scenario.

The two most likely scenarios, however, involve the Kurd's reach for autonomy, and eventually independence, and Iraq's strongman syndrome. The Kurds hold power in northeastern Iraq, and they want to keep it and expand it. Suffice it to say that there is no love lost between Kurds and ethnic Iraqi Arabs. Saddam Hussein's regime sought to exterminate the Kurds and initiated two major campaigns to do so. His last was launched because the Kurds had staged a near-enough rebellion in the wake of the Gulf War. The Kurds believed the victorious United States had called upon them to rise up (the U.S. calls for uprising were actually aimed at Iraq's military, not its people), believing we would protect and support them in the endeavor. We didn't. Later, however, the United States established the northern no-fly zone, which gave them enough cover to have a better life than most Iraqis.

Infantrymen take cover behind dirt piles during the 2003 advance into Iraq.



A Bradley fighting vehicle rolls into a village on the outskirts of Baghdad as the Iraqi capital is surrounded by U.S. forces in April 2003.

The Kurds are a militaristic and hard-fighting people. They were trained by Prussians in the late 1800s as an elite cavalry and shock troops for the Ottoman Empire. They were the Cossacks of their area and age. Even today, Iraqi Arabs sometimes deride Kurds by calling them Germans.

The Kurdish *peshmerga* (militias belonging to two major political parties and a couple of wannabe parties) are well trained, disciplined and not afraid of a fight. (The word *peshmerga* loosely translates as someone who boldly faces death.) Assembling with their Kurdish Syrian, Turkish and Iranian cousins, their ultimate aim is to establish Kurdistan, but in a one-step-at-a-time fashion, they will settle for what they think they can get, which is maintaining autonomy and expanding their territorial control to include the cities of Mosul and Kirkuk. Control of Mosul, even among Kurds, might be rather problematic, but they certainly will fight to hold Kirkuk, which is Iraq's major oil production center—that means money, and that means other Iraqis will fight to control it, too.

Currently, the Kurds still have a rather hands-off relationship with Baghdad while continuing to participate in the central government. If the government breaks up, pushes too hard or the strongman syndrome (rooted deep and wide) hits, expect a Kurdish breakaway and at least a fight for Kirkuk.

Iraqis seem most comfortable with a system of one man at the top who calls the shots, regardless of the hierarchical group—family, tribe, workplace or government. In the deeper recesses of their souls, many Iraqis want a benevolent and less bellicose and bloodthirsty version of Saddam at the helm. Someday they will probably get him. Whether he will be more benevolent and less bellicose and bloodthirsty remains to be seen. Sooner or later, a politician or a senior Iraqi military officer will get the notion that he is the strongman needed.

Even Iraq's current prime minister, Nouri al-Maliki, is displaying increasing strongman traits, having better secured his political position of late while casting himself as the champion of sovereignty. He says that he won't run for reelection, but he seems to like the job.

The overall tone of the Iraqi government is growing increasingly petulant—little words and deeds that seem designed to spite Americans, or at least to say that we are not the bosses. Iraq is stretching its juvenile sovereignty boundaries and repaying perceived or real slights of the past.

An attempt either by overt coup or subtle political maneuvering—even a failed attempt—will pose a major danger. And if someone succeeds, well, what then? What are we going to do? Are we likely to stage Regime Change II? No. We are going to have to swallow it like everybody else, shrug our shoulders and say, "Hey, everything was okay when we left."

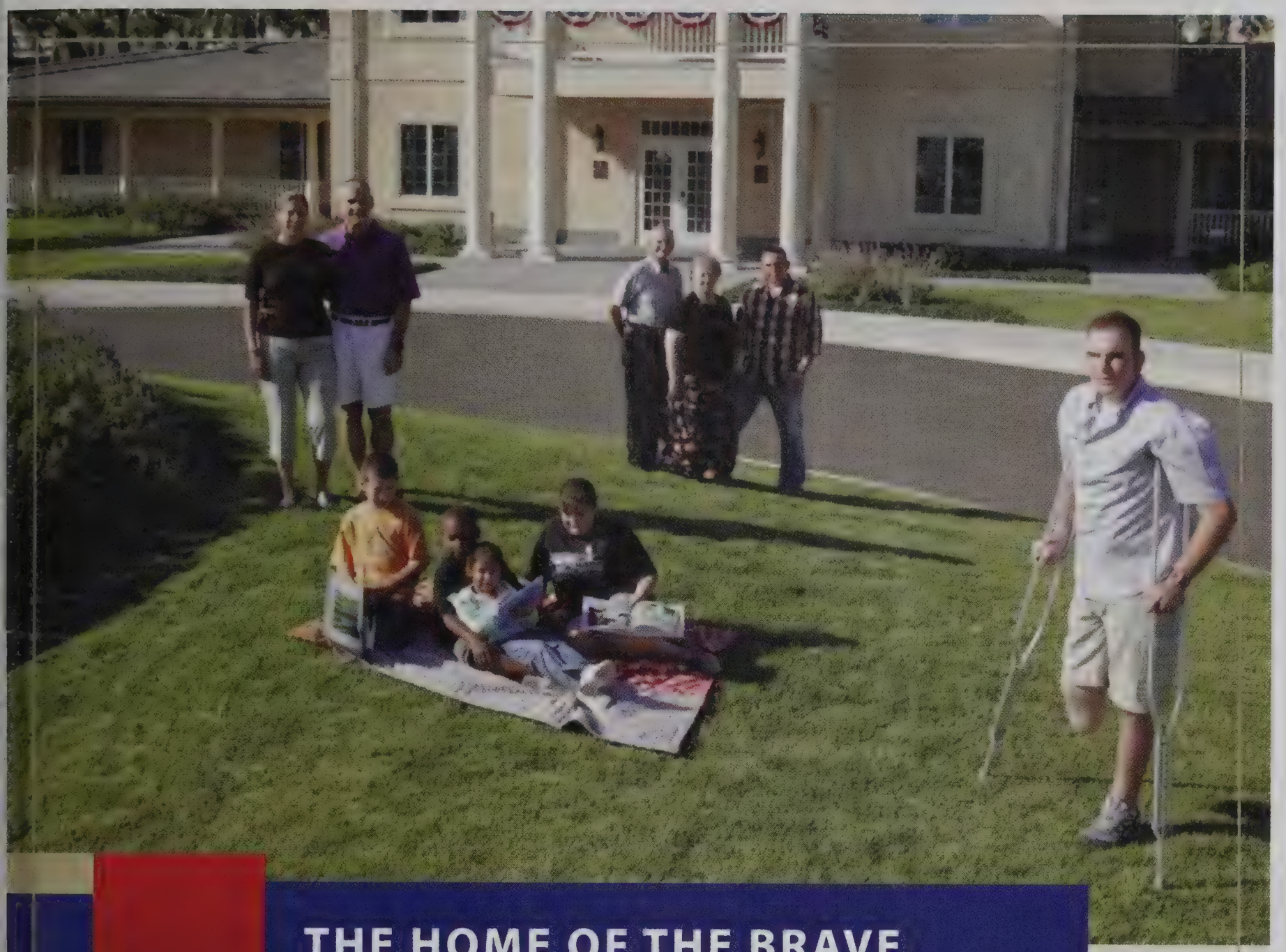
What the Iraqis honestly and deeply want from us now is an increased measure of respect and more signs of it. If cutting Iraq loose and leaving equates to respect, it appears they have it.

"To the Iraqi people, let me be clear about America's intentions," President Obama said at Camp Lejeune. "The United States pursues no claim on your territory or your resources. We respect your sovereignty and the tremendous sacrifices you have made for your country."

To serving military personnel and Iraq veterans, the President said, "We sent our troops to Iraq to do away with Saddam Hussein's regime—and you got the job done. We kept our troops in Iraq to help establish a sovereign government—and you got the job done. And we will leave the Iraqi people with a hard-earned opportunity to live a better life—that is your achievement; that is the prospect that you have made possible."

In each defense budget since 2004, several million dollars have been authorized for an Iraq victory parade in Washington, D.C. The allocation seemed hopeful and optimistic initially, a replay of the grand parade that followed the Gulf War, but at some points over the past six years it has seemed bizarre.

It will be interesting to see if the money will ever be spent—whether march music will echo along Constitution Avenue as ranks of soldiers pass by—but it will be more interesting to find out if this is victory. ★



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PORTRAITS FROM AFGHANISTAN

A Photo Essay by Paul Avallone

Paul Avallone, a former Green Beret who served in Afghanistan in 2002 and 2003, returned as a photojournalist in 2006 and 2008. The soldiers in his photographs on the following pages are representative of the thousands of U.S. Army soldiers deployed to Afghanistan. Right, PFC Bryan Slawson, 1st Squadron, 61st Cavalry Regiment (1-61 Cavalry), deployed to eastern Afghanistan in March 2008 from Fort Campbell, Ky.


LAWSON
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M240 machine gunner SPC Christopher Rodriguez, 2nd Battalion, 506th Infantry Regiment, 4th Brigade Combat Team (BCT), 101st Airborne Division, relaxes for a moment.

Uparmored Humvee turret gunner SPC Dustin Sharp, 1-61 Cavalry

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Gunner SPC Wilson Jackson and loader SPC George Morris, 4th Battalion, 320th Field Artillery, await further fire missions after firing more than 40 rounds of 105 mm ammunition in response to a Taliban mortar-and-rocket attack.



Armed with an M14-based sniper rifle, platoon-designated marksman PFC Slawson scans the landscape.



SGT Brad Forbus, 1-61 Cavalry, serves as his company's sniper.



SPC Nicholas Warden takes cover behind a Humvee with his M249 squad automatic weapon in hand.

Montana National Guard 1LT Aaron Flint mentors Afghan national police working with 4th BCT's 1-61 Cavalry.



Machine gunner SPC Cody Phillips, 2nd Battalion, 506th Infantry, takes part in a dawn patrol.



SSG Travis Harris, 1-61 Cavalry, carries a stray puppy.



A soldier of Company D, 1-506 Infantry, catches his breath while on patrol in the high country of Ghazni Province.

2009 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its fourteenth ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2008.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints, color prints or color slides. Photographs must not be tinted or altered. (Send digital photos to jdow@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The smallest format for slides is 35mm, and slides must be in plastic or paper mounts.
7. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, Social Security number (for identification and tax purposes), address and telephone number, and caption information.
8. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
9. Entries must be postmarked by June 30, 2009. Letters notifying the winners will be mailed in September.
10. Entries will not be returned.
11. Employees of AUSA and their family members are not eligible.
12. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
13. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jeremy Dow (jdow@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.



Platoon leader 1LT Jonathan Bate, Company B, 2-506 Infantry

Sniper SPC Colin Steffa, 1-61 Cavalry, cradles his rifle as he and another soldier scan the countryside.



Platoon medic PFC "Doc" Murphy takes a break next to some Afghani children during a village search.



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SPC Colin Steffa in full combat gear

SFC Anthony Barnes, platoon sergeant, Troop C, 1-61 Cavalry, carefully maneuvers along a ridge.

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Consequence Management at the Company Level In Iraq and Afghanistan

"I got a call late in the afternoon, about 20 minutes before the above-ground unit was hitting a target in a village we had been working hard to get on board with the Coalition. We spun up our QRF. Our desire in situations like this is to be first on the scene. En route, I got the report that there were two enemy KIA and the unit was exfilling after dropping a thermite grenade in a car that the target had used to traffic weapons. Here is what we saw when we rolled in: A car was burning and next to the car was a dead body—burned black (he had fallen dead near the burning vehicle and subsequently caught fire himself). Another military-age male was lying dead with a bullet in his chest. No weapons visible. A woman in her sixties, the mother of these two guys, was screaming and pounding herself in the face. Her face was bleeding and swollen, and chunks of hair were missing from her head. The villagers were gathering and getting increasingly emotionally charged. To make matters worse, the two dead guys were nephews of the local Sons of Iraq leader. The sun was starting to set."

What are your considerations? What would you do?

The Rest of the Story

Gary McCormick
C/1-14 IN

Consequence management is taking the time and the effort, post-event, to ensure that the populace is not swayed to a negative atmospheric based on an event. You've got to be proactive; you've got to be the first there.

The Sons of Iraq in this area were already on the verge of quitting. That initial patrol calmed people down and let them know that it wasn't us, but that we'd find out what happened. It was starting to get dark and the mob was starting to get ... not violent, but we were getting outnumbered. I was like, "Hey, you know what, let's let this calm down." We did our initial consequence management with the Sons of Iraq leader and told him we'd come back the next day.

The next day was what I'd call an "IO ambush." I returned here thinking I was going back to the site to take some more pictures in the daylight, gather some more information and facts. The entire village was waiting and had all of the senior leaders at the main sheik's house. I get pulled over by my Sons of Iraq leader. He brought me into the main sheik's house. There were 20 old guys there all lined up. Picture 20 chairs on this side of the garden and then one on the other side. As you are walking in, you open the gate and you see that and you're thinking, "Oh, crap, this is not going to be good." But you have to put on that flak jacket and take all the hits. Be professional about it—and calm and mature—because you've got a lot of angry people throwing insults and throwing comments out there that you know aren't true, and you can't overreact.

I took this approach: "We're going to overcome this. We are going to still work together. We can get through this. We've had a great relationship, and we are going to continue that. We are going to figure out what the situation was and how we can prevent it from happening again." By the end of the meeting, we had some warm handshakes. There was a slow rebuilding of the relationship.

In the end everything turned out OK, but I truly believe that it did because of our consequence management. If we had not gone there that night and again the next day, I think things would have simmered and boiled over. At the very least, the Sons of Iraq in the village would have walked off.

A Former Company Commander

I think one thing working in Gary's favor is that the two guys who were killed were actively involved in the insurgency. The unit that killed them had done the right thing: The two guys were in fact the target, and, as shown in the subsequent investigation, deadly force on the objective was required.

I think the key point is that even if it is a "good" target, the end result can easily be counterproductive to our cause if leaders on the ground, like Gary, don't immediately get in-



"You've got to be proactive," says CPT Gary McCormick, C/1-14 IN, with Iraqi security forces after a successful raid to capture an al Qaeda-in-Iraq cell leader.

volved. Chris Loftis [see below] talks about getting a "target handover" to help facilitate this, which, I believe, is the ideal.

Chris Loftis
A/1-14 IN

The above-ground units that come in have their own targeting methodology, and they have a different understanding of our battlefield. Establish a relationship with them. Have the phone numbers of the guys that come and do this so that you can call as soon as you get wind that a mission is coming your way. Share everything you can as far as disposition of Sons of Iraq checkpoints and IP/IA, including BLUEFOR. In my battalion and my brigade, it is mandated that you do a target handover when an above-ground unit shows up. If they come in here, the full expectation is that I go find them on the ground and make sure that they hand the target to me.

Lately, the units have been very good at it. They call us in advance and let us know they are coming and ask us for atmospherics. I'll give them blue and red disposition and any operations that took place in that area, and I'll try to talk them onto their objective. When they conduct link-up, they are really good at handing us the objective. This allows me to meet my standards on consequence management. They might come in and SSE a house and leave things in disarray. Even if they grab a bad guy, I think it is important to at least try to put the furniture back in place and clean up a little bit, and if anything's been broken, make sure that the proper restitution is done. One thing I ask from the unit that conducted the mission is to let me take a picture and get a name of everyone they are going to pull off the objective. At my morning security meeting, at the joint coordination center we have in town, I can address what happened and ask, "Does anybody know this guy? Who is he?" This allows me to keep the community better informed (we tell them what the mission was about as best we can without violating any classifications), and it creates the opportunity for people to give us additional background information about anyone who might have been detained. Pictures are critical in this process.



CPT Chris Loftis, A/1-14 IN, receives a report in his tactical operations center. Good communication with above-ground units is crucial in consequence management.

Travis Shain
C/2-14 CAV

Over a series of raids, based on our lessons learned, we developed a technique in which we bring a local leader onto the objective once we are complete—someone we have a good

relationship with and whom the local people respect.

We go to his house and pick him up right before our site exploitation is complete. We bring him in and have him talk to all the families. He's not part of the operation, but after the objective is complete, he can ensure that family members don't beat themselves or make up stories to pass along to the local community about how Coalition forces came in and stole their money and ripped up their houses. It prevents accusations later.

Recently, after a raid, we had a sheik meeting and one of the men stood up and alleged that he had been dragged out of his house in his underwear and that we had torn up his house, beat down his door and his furniture, etc. We *had* been there, and none of that had happened. Our local Sons of Iraq leader had been on the objective and could vouch for us. To save face, they made up a story, but the bottom line was that it wasn't even an issue because a local Iraqi leader was on the objective.

Rob Newbill
B/1-14 IN

Consequence management is moving to a problem site and addressing the problem quickly. Maybe not solving it quickly, but at least identifying what the problems are and formulating an initial plan of action to solve them. The point is to get on the ground quickly, identify what the problem is, and provide some initial information-ops message that explains it or assures the people on the ground that you are going to work to fix it.

In September, there was a patrol conducting a boat infil in a river that was our eastern boundary. We did not know about the boat infil. We knew that the Iraqi army, Sons of Iraq and Iraqi police were occupying some checkpoints to overwatch the river because we had given them information that enemy elements were using river crossings to move between provinces. So they were overwatching the river, and they saw something on the river. The naval patrol used a laser of some type to lase the checkpoint, upon which the Iraqis got excited—and maybe nervous—and fired some warning shots. Gunfire escalated until eventually there was some close air support called in to isolate or suppress the fire coming from the Iraqi security forces at the checkpoint.

It was about as bad as you can get as far as a green-on-blue problem. There were six dead at the site: two IPs, two Iraqi army soldiers, and one SoI. There were no U.S. forces wounded.

We have an Iraqi army TOC here at our JSS. This happened about 1:30 in the morning. They were getting pretty excited, so I walked across and asked them what was going on. Once I got a feel for what the problem was, I knew we had to get there quickly, so I stood up my TAC. I arrived at the area and met with some key leaders. I learned that they had a couple of seriously wounded men they were trying to treat. We were able to move quickly, sustain those guys and conduct a medevac to get them out.

Although it was a terrible situation, at least the people knew that our unit came to help.

In the weeks that followed, we continued to work on this. Part of Iraqi culture is that if you take a life, you make a payment to the family to help them out. One thing that we try to do is to make each of those payments a special event, almost like a memorial where you express to the family your condolences and make sure they understand that it means something to you that their loved one was a member of the ISF and gave his life in support of his country.

Scott Horrigan
A/2-87 IN & HHC/1-32 IN

I look at consequence management as a unit's efforts to recover from or diminish the potential negative IO impacts of your actions. It allows you to get the truth out before the



CPT Travis Shain, C/2-14 CAV, with Iraqi sheiks and a Sons of Iraq leader. After an objective is complete, he relies on respected local leaders to vouch for the actions of Coalition forces.

CompanyCommand Glossary

Above-Ground Unit—An outside unit that briefly enters an area for a specific purpose, as opposed to a 'ground-owning' unit that works daily in that particular geographic area.
BLUEFOR—Blue forces (in this case, U.S. forces). NOTE: Blue = U.S., Red = Enemy, Green = Iraqi security forces.
Exfil—Departure from the objective area.
FOB—Forward operating base.
IA—Iraqi army.
Infil—Infiltration (to the objective).
IO—Information operations.
IP—Iraqi police.
ISF—Iraqi security forces.
JSS—Joint security station; similar to combat outpost or forward operating base but collocated with Iraqi security forces of some type.
KIA—Killed in action.
QRF—Quick reaction force.
Shura—Group consultation convened for decision making.
SoI—Sons of Iraq (local militia who, at the time of this article, were providing local security in partnership with Coalition forces). Part of the "awakening" or *Sahwa* movement.
SSE—Sensitive site exploitation.
TAC—Mobile command post.
TOC—Tactical operations center.

facts can be manipulated by the enemy into false information. Just like any battle drill, consequence management can be done hastily or with deliberate thought; obviously, the latter is ideal.

In order to conduct deliberate consequence management, you have to plan how to deal with mistakes, such as damaging property, injuring or killing an innocent civilian, or detaining innocent personnel—all of which can be used by the enemy as examples to the population that U.S. and Coalition forces are not the answer to their problems. A technique I've seen work is to designate a reserve force with a priority of planning to act as a consequence management team. This force is task-organized with assets such as PAO/media, medical services, civil affairs, counter-IED teams, engineers, interpreters and—most importantly—some type of host-nation force and government representation. A properly task-organized element that continues to ask the "what if" question has the ability to engage with the local population immediately and accurately before the incident degrades any possible success the mission could have had.



A 2/25 Stryker Brigade Combat Team soldier greets Iraqi children. Engaging with the local population and treating the people respectfully helps win their trust and cooperation.

An example of a hasty consequence management action was in Afghanistan when a company-size FOB was attacked in the middle of the night. Insurgent fighters launched their attack from within civilian homes that were in close proximity to the FOB. At the conclusion of the clearance through the village, 12 insurgent fighters were killed and two wounded insurgents were captured. Several U.S. soldiers were wounded, and there was a significant amount of damage done to civilian property during the attack, but there were no civilian injuries. Over the next six hours, the company and battalion headquarters immediately put together a plan, first to capitalize on what was a clear victory for U.S. and Afghan forces and second, to deny the enemy the opportunity to change the facts.

Several steps were taken. First, we informed the provincial governor and coordinated for him to visit the FOB that same day. Considering that he had only been to this part of the border once over the last year, this in itself was a huge statement. Second, the Afghan press was invited and was escorted by the governor to the FOB. Third, the company arranged for a large-scale "mega *shura"* to be conducted between the tribal elders and the governor. During this *shura,* the tribal elders were shown proof that the insurgent attack failed, that there was no loss of civilian life and that arrangements were made to have damaged property repaired. By the end of the *shura,* the tribal elders and the governor praised both Afghan and U.S. forces for their restraint and their effectiveness. The *shura* provided a very tribal Pashtun region an opportunity to connect with and gain confidence in the provincial governance. The Afghan press corps turned a local victory into one that was seen on Afghan TV and heard over the radio throughout the country.

Lucas Yoho
A/1-27 IN

One of my platoons killed a local-national girl—they ran her over. It was a complete accident. My soldiers were doing all the right things. What happened was the father was on one side of the street and the girl was on the other side, and he called her across the street. She ran out between the cars, tripped and got run over. None of our guys saw



After taking command of A/1-27 IN, CPT Lucas Yoho, who believes being first with the truth is key to successful consequence management, greets an Iraqi leader.

er at all. Four years old … It was a tragic situation. She ied instantly, massive head trauma. The platoon did a reat job of consequence management in the aftermath.

We engaged with the Iraqi police and with the family. We pened an investigation with the Iraqi judge; obviously, we id everything on the Coalition force side. Regarding infor- ation operations, I immediately called the Nahia Council nd, within the hour, called the judge, the Iraqi police, the ational police and anyone else I could think of at the time explain what had happened. We called the Qada chair- an to say, "Here is what happened," so there wouldn't be ny false stories or rumors. In Iraqi society, *bam,* you'll ave an instant story otherwise.

We were first with the truth, and we were very open about The girl's family was very appreciative. They told me they ppreciated our being so open and honest. We compen- ated the family, of course. We later played a loudspeaker nnouncement around the city to explain the incident, to pologize and to ask people to stay away from vehicles.

Being first with the truth is absolutely key; it pays huge vidends. The enemy will use things like this against you in heartbeat. We acted fast, so they had nothing. Although ou may not plan for a specific incident like this, you can an for a bad event to happen and have almost a battle rill as far as who you are going to call when there is trou- e. Obviously you call your boss, but you also call the peo- e you work with, your partners. You think quickly and ask ourself, "What can I do to affect this situation and come ut on the positive side as much as possible?" That's just hat we do from day to day.

Chris Loftis
A/1-14 IN

Anytime we hit a target, it's all about dignity and respect. itially, obviously, you have to take care of security. For ex- mple, if you are conducting a raid and there is a suicide- st threat, then obviously there are a lot of things you have to do to protect the force. And some of those things aren't exactly civilian friendly. So to keep everyone secure and to control an objective, it can get a little aggressive.

However, if there's a bad guy that you detain, you are still going to treat the kids and the women with dignity and respect, and you're going to make sure that they are going to be OK. Just having good manners goes a long way here. If you pull a bunch of people out of a house in the middle of the night, make sure they have their shoes on before you throw them out in a street that's full of sewage. If you have a bunch of old folks, go find some chairs and sit them down. Little simple things like that have larger second- and third-order effects on the way people talk to you, the information they'll bring you and on the trust you can establish.

Through the CC forum, company commanders are connecting in conversation with each other and becoming more effective leaders as a result. If you are one of 10,000 CC forum members, please log on to http://cc.army.mil and join the conversation. If you are not a currently commissioned Army officer and wish to contribute to the conversation, send your thoughts to peter.kilner@us.army.mil, and we'll post them for you.



AUSA Sustaining Member Profile

Mile Marker International

Corporate Structure—President and CEO: Robert (Bob) Fernandez. U.S. Headquarters: 2121 Blount Rd., Pompano Beach, FL 33069. Telephone: 954-782-0604. Web site: www.milemarker.com.

In 1981, Mile Marker International began designing, manufacturing and selling four-wheel-drive hubs for off-road vehicles. These products dramatically increased fuel mileage, hence the name Mile Marker. In the 1990s, the company developed and patented a hydraulically operated winch that used the vehicle's power-steering pump for power. This winch is uniquely suited for serious off-road vehicles—commercial, recreational and especially military.

With a typical electric winch, the pull time is limited by the battery capacity to eight to 12 minutes or less, whereas the hydraulic winch provides unlimited pull time. This setup also allows the vehicle's drivetrain to be used to help in the recovery process, which power take-off (PTO) operated units can't do.

The hydraulic winch was so well received and successful that Mile Marker used its winch expertise to enter the electric winch market in 2004. Mile Marker continues to be an innovator by introducing new designs and electronics for winches: The company is currently introducing the world's first series of solid-state, variable-speed recovery winches, which allow infinite control of speed and power to provide the level of control needed for any winching task.



Mile Marker now designs and manufactures all three product lines: hubs, hydraulic winches and electric winches.

The company headquarters and military-production facility are colocated in South Florida with 25,000 square feet of warehouse and production space. A 20,000-square-foot West Coast distribution center is located in Washington state. Mile Marker also owns and operates a factory located in ShenZhen, China, adjacent to Hong Kong. This facility was established to expand production capacity while allowing tight quality control on Mile Marker's commercial products and has 66,000 square feet of production and warehouse space. Altogether, Mile Marker employs more than 100 personnel and has an extensive supplier network.

The company's association with the U.S. Army began in 1999 when it competed to supply winches for the Humvee. The winches were extensively tested by the U.S. Army Tank and Automotive Command before being approved for the AM General production line and inclusion in the Army supply system. Since then, the hydraulic winches have been mounted on thousands of Humvees and are used in every theater of operation—including Iraq, Afghanistan and Europe—and by Special Forces.

At the Mile Marker exhibitor's booth at a recent AUSA symposium and exposition, soldiers came up and thanked the company for products that helped them operate in the field and quickly got them out of some very difficult situations.

Mile Marker is eager to work with manufacturers of military vehicles to provide soldiers everywhere with the unique capabilities of the hydraulic winch or the equally reliable electric winch. The company currently provides winches for several nations' militaries. Mile Marker recently introduced an 18,000-pound hydraulic winch and will soon release a 24,000-pound hydraulic winch specifically designed for the military market, with its extraordinarily demanding requirements. This winch can be operated from the power-steering pump or a PTO. These winches are designed for the mine resistant ambush protected vehicles, joint light tactical vehicles and other heavier military vehicles.

Mile Marker also manufactures a complete line of winches for recreational and commercial vehicles that is sold through every major off-road distributor and retail store in the United States and in many locations overseas. The lineup includes winches for all-terrain vehicles, utility vehicles, 4x4 vehicles and commercial off-road trucks. Mile Marker is sold in retail outlets and catalogues, including 4 Wheel Parts, Cabela's, Tucker Rocky, Sears, JC Whitney and Costco. Mile Marker has dealers in more than 42 countries worldwide.

Mile Marker's focus is on dedicated support to the military through integrity, responsiveness and high-quality products designed to support our soldiers and units in the field. The company recently completed its ISO 9001:2000 audit with no deficiencies and is ready to make the transition to ISO 9001:2008. Mile Marker works closely and successfully with the regional Defense Contract Management Agency office for quality control and inspection.

Mile Marker designers are very familiar with military requirements and take pride in designing and testing products to make sure they work right the first time—and every time—so soldiers can count on them in every kind of environment. Part of the company's quality control statement is "Tested to the Extreme," and its motto is "Abused Worldwide." Mile Marker is never satisfied with the status quo and is constantly using its knowledge and expertise to improve winch operations, features and reliability. The company highly values its association with the soldiers of the United States and their units. Mile Marker is honored to be a sustaining member of AUSA and appreciates the opportunity to support U.S. soldiers worldwide with its products and membership.

Soldier Armed

Tactical Wheeled Vehicles

By Scott R. Gourley

Multiple upgrade and enhancement efforts now taking place cross light, medium and heavy weight asses are continuing to mold the rmy's tactical wheeled vehicle fleets meet evolving warfighter needs.

The emerging joint light tactical vecle (JLTV) program provides an exellent example. Seen by some as an ventual replacement for the ubiquius Humvee family of vehicles, the ated JLTV goal includes the develpment of "a family of vehicles with mpanion trailers capable of perrming multiple mission roles that ill be designed to provide protected, stained, networked mobility for ersonnel and payloads across the full nge of military operations. ... JLTV bjectives include increased protecn and performance over the current eet; minimizing ownership costs by aximizing commonality, fuel effiency and other means; [and] maintining effective competition throughut the life cycle."

With these objectives in mind, the overnment solicited proposals for the TV technology development (TD) ogram in early 2008. Industry prosals were received in April, with bsequent government evaluation ading to three TD awards in October. ward recipients included BAE Systns Land & Armaments, Ground Systns Division, Santa Clara, Calif.; General Tactical Vehicles, Sterling Heights, Mich. (a joint venture between General Dynamics Land Systems and AM General); and Lockheed Martin Systems Integration-Owego.

In November 2008, however, as the teams were beginning their TD activities, protests were filed with the Government Accountability Office (GAO) against the JLTV family of vehicles TD contract awards.

Following a period of analysis and study, in February 2009, the GAO denied the two protests against the JLTV technology development awards, allowing those teams to move into the projected 27-month TD phase. During this phase, the contractor teams will provide a number of vehicles and associated equipment that will undergo a series of performance and reliability testing, including joint warfighter assessments.

Current government plans call for conducting another full and open competition upon completion of the TD phase, leading to the award of two contracts for further development and demonstration. This would be followed by a Milestone C decision in fiscal year 2013, with full production and fielding anticipated in 2015.

It is important to note that while the protests may have slowed some early JLTV technology development efforts, they have done nothing to slow other recent and ongoing tactical wheeled vehicle efforts designed to meet the critical platform mobility needs of today's warfighters.



General Dynamics Corporation





BAE Systems

JLTV technology development award recipients: GTV, a General Dynamics Land Systems and AM General joint venture (left); Lockheed Martin Systems Integration-Owego (below left); and BAE Systems Land & Armaments, Ground Systems Division (below).



Oshkosh

The upgraded palletized load system (PLS), Oshkosh's 1074 PLS A1, has improved durability and performance and greater power.

MG James E. Chambers, commanding general, U.S. Army Combined Arms Support Command and Fort Lee, N.J., recently provided a brief update on some of these representative efforts during a recent briefing to industry. "From 2001 to 2009 we've had various levels of conditions—whether in Afghanistan, Iraq, Kuwait or someplace else—that have led to changes. And one of those change areas has always been in the materiel community," he said.

MG Chambers then offered representative examples of these changes within the light, medium and heavy tactical wheeled fleets. "I think we have nine different variants of the Humvee operating right now," he observed. "The variants have been developed over the past few years based on one of two things: Our payload has gone up, so we need more power, or we need more protection for those inside the vehicle. Protection and payload have driven change within the platforms across the tactical wheeled vehicle community."

The newest Humvee variants are based on the expanded capacity vehicles 2 (ECV 2) chassis. "Regarding ECV 2, we've already made some decisions to go after some ambulances and maybe a couple of other platforms with this variant," MG Chambers said. "And we look at the ECV right now as a bridge that will take us to JLTV. If we are going to buy Humvees for the next five, six, eight years—whatever it is while the JLTV is being developed—we want to buy the platform that can carry the most, perform the best and protect our soldiers the best."

Moving to a slightly heavier weight class, he said, "Our medium fleet carries most of the tactical load. In medium tactical vehicles, we've gone from a thin-skinned vehicle to an armored vehicle. There is great success in the logic behind the strategy of armoring this vehicle, where you encapsulate the cab and you take risk in other areas. That's been a life-saving methodology—an A-kit/B-kit type methodology where everything comes with an A-kit [base armor package] and then you focus future developments on the B-kit [add-on armor]."

"In the heavy [tactical vehicles] category, again, there are a lot of changes. At Aberdeen Proving Ground, Md., today we've got the M915A5 that we're running through with some rigor," MG Chambers added. "One of the fleets that suffered the most OPTEMPO in terms of miles was the 915 fleet. And having an aluminum chassis brought its own challenges. As we tried to armor it, we made it heavier. And, of course, the performance also suffered as we made it heavier."

In addition to a new cab design reflective of the Army's long-term armor strategy, the M915A5 incorporates a number of improved performance features.

Shifting his representative program overview with the M1070 heavy equipment transporter, MG Chambers acknowledged: "For the most part, we're the end of the production line for our heavy equipment transporters. But in the miles it travels and the various systems that grew onto this platform we've looked at modifications to the platform to make it more durable and to give it better performance in terms of suspension and power. At the end of the day we have a better vehicle."

MG Chambers concluded with a quick review of some of the current efforts surrounding the M1074 palletized load system (PLS) and the M977 series heavy expanded mobility tactical truck (HEMTT).

"The PLS has been another great successful platform that has gone through similar changes in terms of performance, payload and protection," he said. "And I think our next large unit move into the area of responsibility will be equipped with HEMTT A4s—the new variation of the HEMTT platform that brings far greater capability than previous models. So soldiers are getting a solid system that already had a good reputation to begin with and has gotten better over time."

Just as today's soldiers' needs are justification for these current vehicle payload, performance and protection enhancement efforts, their anticipated needs support tomorrow's requirements for programs like JLTV.

In announcing the recent JLTV Government Accountability Office protest resolution, Army representatives reiterated this priority: "As the Joint services prepare to meet the challenges of future coalition operations, they must be equipped with tactical vehicles capable of performing diverse mission roles around the globe."

Echoing that sentiment, Kevin Fahey, program executive officer for combat support and combat service support, added, "The joint protection requirements found within JLTV are designed to better meet our warfighter's current and future survivability needs—all packaged in a mobile, transportable, supportable and expeditionary solution."

Reviews

Powerful Reminder of War's Brutality

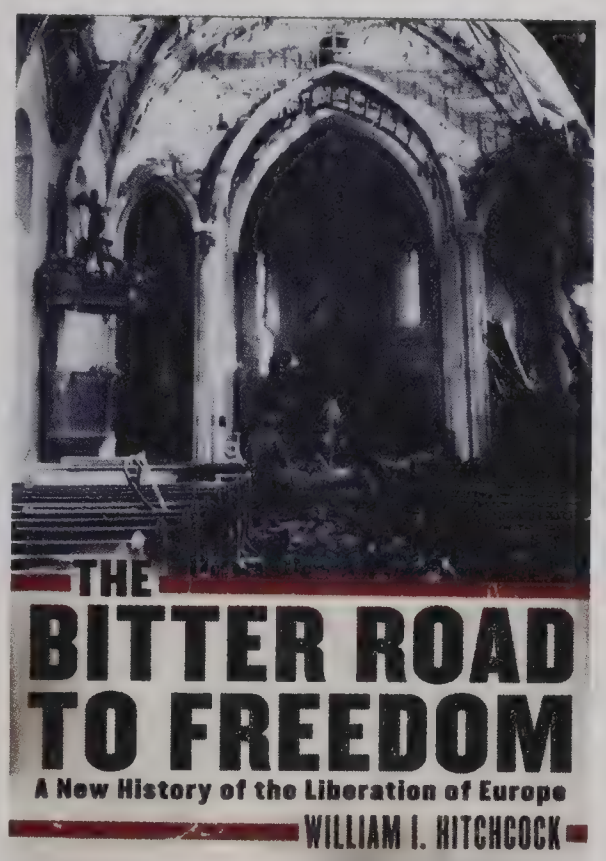
The Bitter Road to Freedom: A New History of the Liberation of Europe. *William I. Hitchcock. Free Press. 464 pages; maps; black-and-white photographs; index; $28.*

By BG Harold W. Nelson
U.S. Army retired

Today's Army is engaged in "liberation" and reconstruction, so many readers of ARMY Magazine might find William I. Hitchcock's *The Bitter Road to Freedom* useful. The focus is even narrower than the title indicates, with big parts of the story left untold, but the narrative builds a series of impressions that are powerful, well-documented and helpful to anyone who studies the brutality of war.

Hitchcock asserts that the American version of European liberation is a paean that opens with D-Day in Normandy and the breakout into eastern France, moves to a darker second act when German forces resist and counterattack near the border with Belgium, and ends triumphantly with the total victory of Allied forces. The fighting in North Africa is scarcely mentioned, and Italy and the Balkans are far from center stage. This weakens the story, because many of the key leaders—Dwight Eisenhower, Bernard Montgomery and Omar Bradley—had begun to develop ideas about the relationship between liberated populations and the larger war effort during the operations of 1942–43, and significant capabilities began to mature during that time period that were then brought to bear in northwest Europe in 1944. By the time the Western Allies came ashore in 1944, they had already been sensitized to the problems that accompanied their role as "liberators," and their Soviet counterparts had demonstrated their propensity to be vengeful conquerors. By starting in Normandy, Hitchcock's interpretation skips over the significant role played in 1944 by French army liberators whose formations had been nurtured and tested in 1943 and who rose to become important partners by the time the war ended.

Setting aside those caveats, *Bitter Road* effectively describes the brutality of combat capabilities in World War II and the dire consequences for the civilian populations in the path of operations. High explosives had reached



a pinnacle of perfection by 1944, but the methods for targeting and delivering those explosives lacked accuracy. Attackers saturated targets to achieve desired effects, shattering cities such as Caen, Cherbourg and Saint-Lô and crippling the transportation network in the early weeks of the campaign in Normandy. These actions caused thousands of civilian casualties and compounded the difficulties in a society that had been stripped of labor, equipment and foodstuffs by the Nazi occupiers.

Hitchcock calls Civil Affairs (G-5) an "echelon" rather than a function, but he recognizes the fundamental purpose: Get the civil society functioning again so that Allied military objectives can be achieved. He uses Cherbourg as an excellent example of a corps Civil Affairs detachment working effectively with surviving French authorities and available U.S. resources to restore order, repair damaged infrastructure, care for casualties and distribute supplies. He contrasts the utilitarian, future-oriented approach of the Americans with powerful local forces aiming to "shape the social order" through public humiliation of women who had consorted with German soldiers.

This leads into the story of Norman women who were raped and exploited by American soldiers when the combat forces moved forward and support units managed the logistical buildup. This important story of criminal activity is meticulously documented using court-martial records. It's an important reminder that crimes by a liberating force have negative consequences beyond the criminal acts themselves, whether directed against persons or property.

The story of the Red Army's crimes against all that stood in its path is told in some detail, but here the sources are victims' accounts rather than court-martial transcripts because the Soviets seldom punished soldiers who exploited people or property in their vengeful advance into Germany. Thousands fled before the Soviet advance, and many sought to avoid repatriation.

The resulting hordes of homeless, virtually helpless, civilians nearly overwhelmed Western occupation forces who were trying to establish civil government, deal with hundreds of thousands of prisoners of war and repatriate slave laborers who had been taken from the countries occupied by the Nazis. The United Nations Relief and Rehabilitation Administration (UNRRA) was the new organization created to take

the lead in addressing problems such as these, and we get a sympathetic account of its difficulties in joining a team dominated by Allied military headquarters.

Those difficulties were virtually insurmountable where the surviving European Jews were concerned, and that set of problems receives excellent coverage. Most of us who study the immediate aftermath of World War II focus on the recovery of the nations of Europe. We tend to forget that the British government resisted the movement of large numbers of Jewish refugees to the Palestine Mandate until 1948. Throughout nearly three years, thousands of additional Jewish refugees appeared in the American sector from Eastern Europe, continuously challenging the ability of UNRRA, the U.S. Army and non-governmental organizations to fulfill humanitarian requirements.

All wars are brutal. Everyone touched by war's destructiveness is diminished or damaged. Hitchcock's *Bitter Road* reminds us that those generalizations apply to "the good war" as well as to any other.

BG HAROLD W. NELSON, USA Ret., is a former U.S. Army Chief of Military History. He has served on the faculties of the U.S. Military Academy, the U.S. Army Command and General Staff College and the U.S. Army War College.

The Human Face Of the War on Terrorism

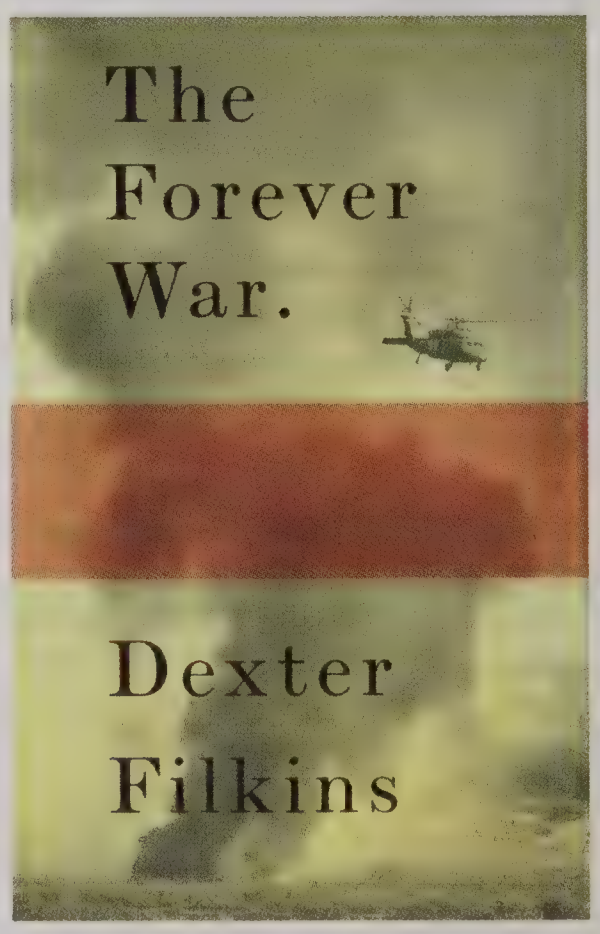
The Forever War. *Dexter Filkins. Alfred A. Knopf. 384 pages; black-and-white photographs, index; $25.*

By LTC Mike Burke
U.S. Army retired

Many books about the wars in Iraq and Afghanistan have focused on the mistakes made in planning and prosecuting the conflicts. Volumes like *The Assassin's Gate, Fiasco* and *Imperial Life in the Emerald City* depict the ineptitude, ignorance and arrogance behind American policy in these countries. But all of these books, in one way or another, leave out the people most affected by the larger movement of public policy—the Afghanis, Iraqis and soldiers themselves.

Dexter Filkins, a foreign correspondent for the *New York Times,* sets out to correct this in *The Forever War.* He has spent more time than most chronicling the Middle East, and this book, a collection of his reporting that spans nearly a decade, shows what happens when someone truly "lives" this area over a long period of time. Filkins can tell us things no one else can, and his focus on individuals is profoundly disturbing.

Filkins begins with his coverage of a Marine rifle company in Fallujah, Iraq, in 2004, an experience in which one marine is killed while escorting him and a photographer to a mosque. He then jumps back to Kabul, Afghanistan, in 1998, where he witnesses the rise of



the Taliban (chaos, public executions), and then to New York on 9/11 (chaos, grief) and back to Afghanistan after the U.S. invasion. There, he illustrates th complexity of the conflict—the shiftin sides, the tribal and personal connec tions that trump politics—the messi ness of which, frankly, makes a mock ery of American intentions. Filkins ha a gift—he makes all this new again, a if we are coming to know it all for th very first time.

The majority of *The Forever War* re ports on Iraq from March 2003 unti the end of 2006, from the invasion an its immediate aftermath to the hig point of the insurgency. While recen reporting recounts success more tha failure, Filkins undercuts this narrativ by reminding us what went before. H puts a human face on the occupatio particularly an Iraqi one, presentin numerous locals trying to understan their changed circumstances and the occupiers' intentions, while also de picting naïve Army officers and clue less civilian administrators.

"There were always two conversa tions in Iraq," he writes, "the one th Iraqis were having with the American and the one they were having amon themselves," meaning that most Ame icans could not jump the divide of lan guage and culture in the country fo which they were now responsible.

Filkins' corrective approach include interviews with Iraqi insurgents, shop keepers, engineers, soldiers, educator government officials and families. I each case, he shows the costs and bene fits experienced by ordinary peopl caught up in extraordinary circum stances. We see exactly how polic plays out in individual lives.

One experience in particular re mains with me, I think, because I, lik Filkins, simply do not know what t make of it: Interviewing an Iraqi fam ily following the death of their son, h finds them calm and rational; whe his photographer takes their pictur however, they suddenly start wailin he says, "as if on cue."

Of all the faces that haunt Filkin two stand out: William Miller, of Pea land, Texas, the marine killed while e corting him, and Jill Carroll, the Amer can freelance reporter captured b insurgents. He describes Miller and h platoon in strong, vivid terms and eve

oes so far as to meet Miller's family af-
er his death. They claim they are
appy to know exactly how their son
ied and bear Filkins no ill will, but he
eels singularly responsible for their
on's death and cannot let it go, calling
heir apparently calm demeanor a kind
f Potemkin village of grief.

With Carroll, Filkins recounts his at-
mpts at navigating the sticky inter-
ices between the American world—
orking with the CIA—and the Iraqi
orld—working with one of his infor-
ants—in an ultimately unsuccessful
tempt at rescuing her. He has to be-
ay the confidence of an Iraqi infor-
ant, which causes the arrests and
eaths of other Iraqis, for which he
so feels responsible.

Few Americans would likely give
hmed Chalabi the attention Filkins
oes, devoting one chapter, aptly titled
'roteus," to this enigmatic figure. He
llows him through his various gov-
nment roles, travels with him to
hran and leaves him, finally, back in
ghdad, where Chalabi resumes yet
other government post. Filkins does not assess, he simply reports, and we are left to draw our own conclusions. Perhaps this is fitting, because the end state in Iraq has yet to be determined. Even now, two years after the end of this book, we don't know what that might be.

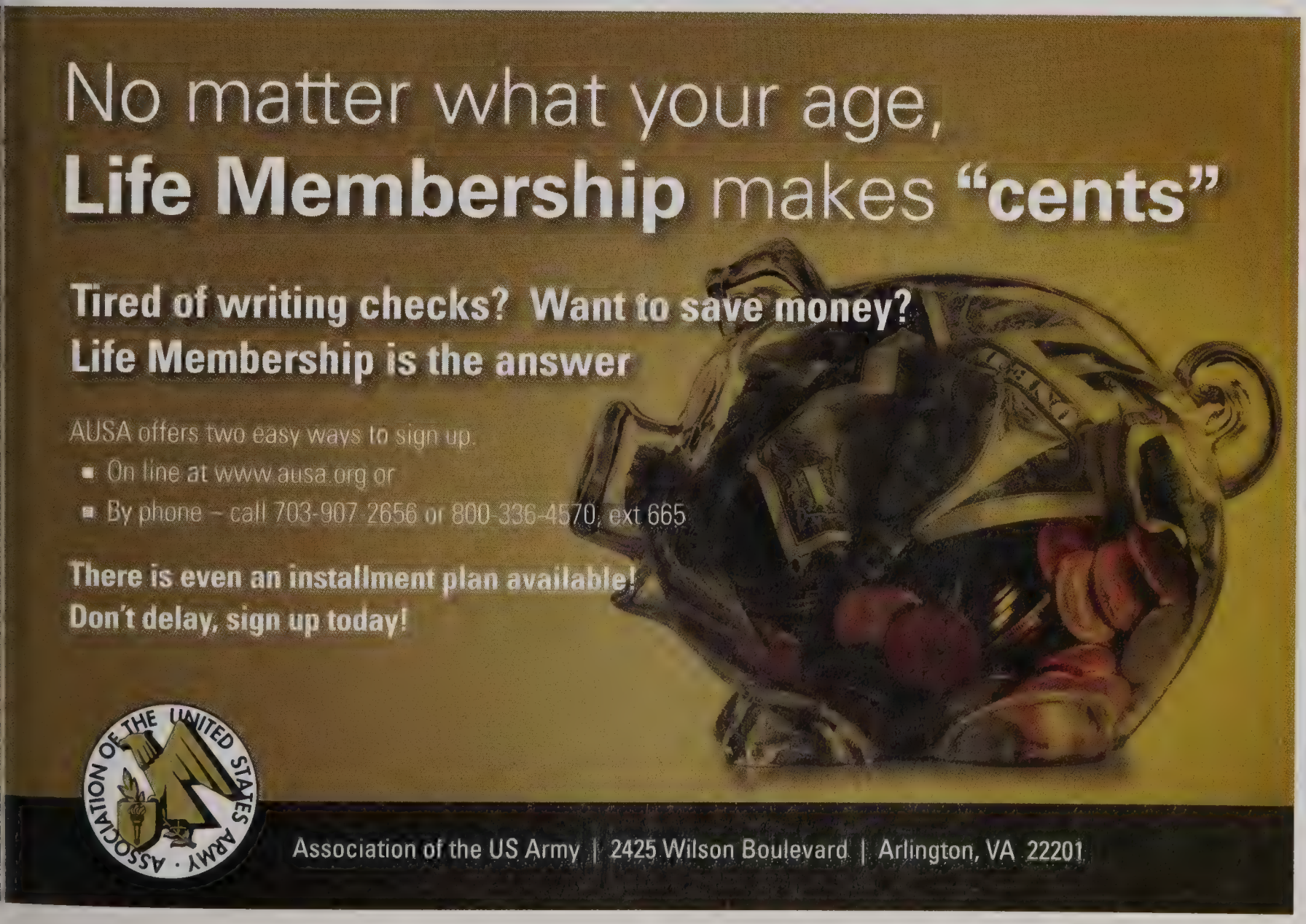
The book concludes with Filkins' return to the United States for an extended period—in part to write *The Forever War,* in part to reconstitute himself. He brings his readers up to date on what has happened to the many Iraqi interpreters and "fixers" he employed, many of whom have settled in the United States. His acknowledgements section at the end recounts the personal sacrifices he made in order to report the wars as honestly and intimately as he does.

Filkins' most recent reporting in the *New York Times,* written after the last chapter of *The Forever War,* reflects his practice of focusing on individuals and how the vastly improved security situation in Iraq has made their lives better. His dispatches from Afghanistan are a mix of straightforward reporting of events and stories of people who are trying to negotiate the still-complex landscape of this country others have called a graveyard of empires.

Filkins demonstrates the truth of poet W.H. Auden's lines about "suffering" and "its human position." His writing reminds us that great events have specific yet immeasurable and unknowable human consequences; no matter how extraordinary the strategic vision, its playing out in individual lives ultimately determines its success or failure.

As we prepare ourselves for an expanded war in Afghanistan and claim some success in Iraq, many ARMY Magazine readers probably do not need reminding. But the vast majority of our countrymen, most of whom have no personal connection to either war, need to be told this kind of truth.

LTC MIKE BURKE, USA Ret., taught English at the U.S. Military Academy for eight years. He served with the 1st Armored Division during the Persian Gulf War.



'Tell Me How This Ends'

The Gamble: General David Petraeus and the American Military Adventure in Iraq, 2006–2008. *Thomas E. Ricks. Penguin Press. 352 pages; maps; black-and-white photographs; index; $27.95.*

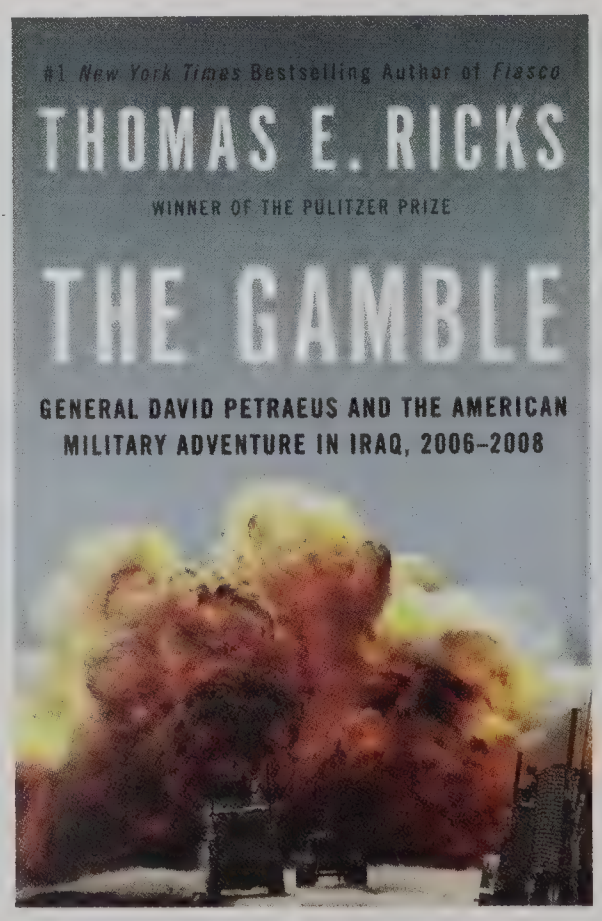
By John A. Nagl

When former *Washington Post* military correspondent Thomas E. Ricks published *Fiasco* in the summer of 2006, he provided a single-word assessment of the conduct of the Iraq War to that point. The white-hot indignation Ricks displayed in *Fiasco* was mirrored by those in the know who read it; one senior senator told Ricks that he had to put the book down every few pages and walk around the block because he was so angry at the mistakes that marred nearly every action the United States took in the first years of the war. It was not a happy book.

The Gamble picks up where *Fiasco* left off. Subtitled *General David Petraeus and the American Military Adventure in Iraq, 2006–2008,* it is unlikely to serve as a cardiovascular exercise program for the many senators who will surely read it. If *Fiasco* is an indictment of how America drove Iraq to the edge of full-scale civil war, *The Gamble* is the narrative of how a new strategy, supported by additional resources and implemented by people who have learned a great deal about counterinsurgency in the past five years, pulled Iraq back from the precipice.

It is hard to remember now how bad the situation in Iraq was when *Fiasco* was published. Ricks takes us back to those dark days in the opening pages of *The Gamble,* beginning with a roadside bombing in November 2005 in Haditha that killed a marine. The marine's squad mates then killed 24 Iraqis, some of them women and children. Ricks believes that the actions of the marines on that morning were the "disturbing but logical culmination of the shortsighted and misguided approach" taken by the U.S. military up to that time in Iraq: Protect yourself, not the Iraqi population. The attitude was summed up in the words of one marine who participated in the action that morning. He claimed: "Because of me, no one else died"—meaning, no other marines. The Iraqi dead didn't count.

Two weeks before the bombing in Haditha, then-LTG David Petraeus had begun a project that would fundamentally change this worldview for the U.S. Army and Marine Corps. Recently returned from his second combat tour in Iraq and assigned to the Army's Combined Arms Center at



Fort Leavenworth, Kan., he began a comprehensive effort to write a new rule book for the war in Iraq. The U.S. Army/Marine Corps' field manual *Counterinsurgency,* written under the direction of Petreaus' West Point classmate Conrad Crane, would prioritize two factors that had not marked American performance in the war to that date—protecting the civilian population first, even at the cost of greater risk to American troops, while constantly learning and adapting to the demands of the war on the ground.

Petraeus was not the only officer who recognized that American actions in Iraq were less than successful t that point in time—others did as wel The American public repudiated th Iraq War strategy in the midterm con gressional elections of late 2006, i which the Republicans lost control (both the House and the Senate. Don ald Rumsfeld stepped down as Secr tary of Defense the next day, replace by former CIA director Robert M Gates.

Some in the Army advocated pullin American troops out of Iraq, while otl ers wanted to increase American boo on the ground. President Bush ult mately decided to deploy an add tional 30,000 U.S. troops to Iraq in wh he described as a "double down," b GEN Petraeus, selected to take com mand of Multi-National Force-Ira from GEN George W. Casey in ear 2007, thought it was "all in." If th surge didn't work, America was out options.

It did work, although the price w very high. American soldiers foug their way into 76 joint security st tions that provided oil spots of sec rity throughout Baghdad and its env rons. The insurgents fought bac ferociously, and American casualti climbed through 2007 until they l nally began to drop precipitously June as civil security returned Baghdad. Ricks lists reasons for th change, including the new Americ force posture directed to protectin the population; the degree of ethn separation between Sunni and Sh that had been accomplished by th time; a cease-fire by Shiite cleric ar general troublemaker Moqtada a Sadr; and the turning of large portio of the Sunni insurgency against Qaeda in Iraq in what became know as the Sunni Awakening. Ricks er phasizes the importance of the uni of effort engendered by the new cou terinsurgency manual, quoting CC James Rainey, then on his third Ir tour, who said, "The biggest diffe ence is, we have doctrine now. Everyone's doing it, protecting th population."

The changed facts on the ground Iraq gave GEN Petraeus ammuni-on for what Ricks describes as the ree fights in which he was engaged 2007: one against the insurgency in aq; one against the Joint Chiefs of aff and his immediate boss, Central ommand chief ADM William Fallon, ho preferred the pull-out transition ategy; and one against the sagging pport of the American public back me. Petraeus won all three, the last e in convincing testimony before e House and Senate in September 07 with the support of his literal d figurative running partner, Am-ssador to Iraq Ryan Crocker. That timony, conducted amid acrimo-us domestic political debate, bought e surge another six months of public pport.

By then, progress on the ground uld no longer be denied. Iraqi Prime nister Nouri al-Maliki, after months fecklessness, conducted an im-mptu attack against Sadrist forces in Basra in March 2008, which succeeded in restoring government control there, albeit with substantial U.S. help. The Basra attacks were followed by an Iraqi-led effort that cleared insurgents from Baghdad's Sadr City slum, leaving Mosul as the last bastion of significant enemy presence during my visit to Iraq in the summer of 2008.

The war in Iraq is far from over; MAJ Joel Rayburn, a close Petraeus adviser, gave the surge an "incomplete" grade, noting that it created military security but failed to promote political accommodation among Iraq's sectarian politicians. Since then, provincial elections have proven both remarkably peaceful and largely nonsectarian, providing hope for an Iraq that may yet achieve a sort of uneasy peace. Those closest to this problem continually emphasize the fact that the progress created by the surge is not yet carved in stone; LTC Charlie Miller, answering then-MG Petraeus' famous "Tell me how this ends" question, replied, "I don't think it does end. ... There will be some U.S. presence, and some relationship with the Iraqis, for decades."

That best-case scenario is a far cry from the bastion of democracy in the heart of the Middle East promised by those who got us into the war in Iraq—but it is also a long, long way from the fiasco that Americans had created in Iraq just two years ago. The gamble paid off, and as a result, the Iraqi people, the entire Middle East and the American people are better off—as long as we don't try to cash in our chips too early.

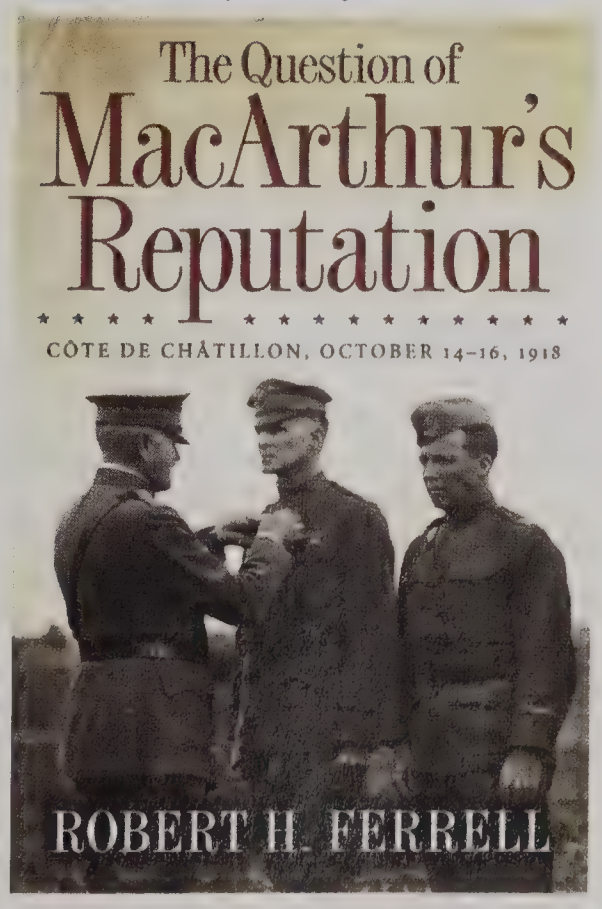
JOHN A. NAGL is the president of the Center for a New American Security. A retired Army officer who fought in Iraq in 1991 and in 2003–2004, he is the author of Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam.

Varied Fare

e Question of MacArthur's Repu-ation: Côte de Châtillon, October 4–16, 1918. *Robert H. Ferrell. Uni-ersity of Missouri Press. 128 pages; naps; black-and-white photographs; in-lex; $19.95.*

No American commander has gen-ted more controversy than General the Army Douglas MacArthur. He s a man of remarkable contradic-ns with a fragile ego where matters personal honor were concerned. World War II air commander, N George C. Kenney, may have ined the most accurate description he controversial general when he ed, "Very few people really know uglas MacArthur. Those who do, hink they do, either admire him or ike him. They are never neutral on subject." Robert H. Ferrell, profes-emeritus at Indiana University author of many books on Ameri-foreign relations, presidential his-and military history, clearly falls he camp of those who view Mac-Arthur in a less than favorable light.

In the past, those critical of MacArthur have generally focused on his



generalship in either World War II or Korea. World War I, in which MacArthur emerged as one of the most highly decorated officers in the American Expeditionary Forces, has been generally off-limits. Until now, that is.

In *The Question of MacArthur's Reputation,* Ferrell examines then-BG MacArthur's leadership during a critical phase of the Meuse-Argonne offensive, when MacArthur's 84th Brigade of the 42nd (Rainbow) Division captured a group of hills called the Côte de Châtillon, the pivot of the Hindenburg Line.

In an effort to "set it all out," Ferrell ponders, "How did MacArthur end up with a reputation as a leader of men in battle, without actually leading his men in battle?" In sifting through the evidence, Ferrell concludes that MacArthur greatly exaggerated his role in the victory and that the true heroes of the battle were MacArthur's subordinates, chiefly battalion commanders Majors Lloyd D. Ross and Ravee Norris. Indeed, Ferrell asserts that the attack would have been an unmiti-

gated disaster had the brigade followed MacArthur's original plan and launched a bayonet attack at night.

Where Ferrell's analysis fails upon more careful scrutiny is in his flawed premise and lack of familiarity with how military operations are actually conducted. MacArthur's reputation as "the greatest frontline general of the war," to use Secretary of War Newton Baker's term, was not defined by three days of combat in the Argonne Forest, but over the entire period of American involvement on the battlefields of Europe. Prior to the action in mid-October 1918, MacArthur served as chief of staff of the 42nd Division and as a brigade commander on the Western Front, receiving four Silver Stars and the Distinguished Service Cross. Côte de Châtillon merely added to his legend as a superb battlefield commander.

When the 42nd Division's field order to seize Côte de Châtillon was published, it called for MacArthur's brigade to do so in three hours. For not protesting this "dramatically silly" order from higher headquarters, Ferrell's MacArthur is either "incompetent" or "no leader of men." When subordinates make adjustments to the brigade's attack order, Ferrell's MacArthur does not decide—he merely "acquiesces." The reader gets the general impression that the 84th Brigade's regimental and battalion commanders make all the tactical decisions and the brigade commander merely goes along for the ride.

Ferrell also chides MacArthur for directing the operation from his command post 3 miles behind the front lines instead of leading the forward battalions in the assault. Ferrell opines that during several stages of the battle, MacArthur's presence with the forward elements might have eliminated confusion—far better to leave such decisions to the tactical commanders who routinely control forces in combat without the benefit of 20/20 hindsight.

Finally, Ferrell tackles "the question of GEN MacArthur's immodesty, his willingness to take credit" for the brigade's success.

As historian William Manchester notes in *American Caesar,* "All MacArthur's life, he was given to superlatives, and facts usually modified them," but Ferrell's allegation that MacArthur accepted all the credit for the capture of Châtillon simply does not ring true. In his own self-serving *Reminiscences,* MacArthur cites both Norris and Ross as indispensable to victory. Though his division and corps commanders recommended MacArthur for promotion and receipt of the Medal of Honor, MacArthur neither claimed that he was solely responsible for the brigade's success nor did he deny recognition to his junior officers.

If Ferrell's intention is to challenge the conventions of history, he has certainly succeeded. This brief monograph, less than 80 pages of text, calls into question MacArthur's tactical acumen and his heroism under fire in World War I.

One wonders how MacArthur received two Distinguished Service Crosses, one Distinguished Service Medal and a record seven Silver Stars in less than 18 months in France. You will not find the answer in *MacArthur's Reputation.*

—COL Cole C. Kingseed, USA Ret.

General William E. DePuy: Preparing the Army for Modern War. *Henry G. Gole. The University Press of Kentucky. 376 pages; black-and-white photographs; maps; index; $35. An AUSA book.*

This biography of GEN William E. DePuy, a fascinating Army officer, highlights his lifelong love of learning. The pursuit of excellence, as he defined it, is what motivated him. He had courage, brains and curiosity. He was by nature a teacher. There is much to learn by reading GEN DePuy's writings, some of which appear in this volume, and there is much more in *Selected Papers of General William E. DePuy,* published by the Command and General Staff College, Fort Leavenworth, Kan.

DePuy was born in 1919 in North Dakota. He graduated from South Dakota State College in 1941 with a bachelor's degree in economics. While in college, DePuy served in the National Guard and ROTC.

DePuy's first assignment was wit the 20th Infantry at Fort Leonar Wood, Mo., in 1941.

DePuy believed that the training h received was inadequate, and th caused him to focus on the impo tance of training right at the start his career. His intensity on this issu never weakened.

When DePuy moved with the 90t Division to England in March 1944, h learned again the importance of trai ing. DePuy thought that his divisio and regimental commanders we "clearly unqualified for command battle."

He believed the situation was so ba that the commander who took his reg ment into Normandy was "as close being totally incompetent as it is poss ble to be."

DePuy saw that leadership was th key to changing the 90th Division fro being one of the worst divisions in E rope to one of the best. These lesso from World War II—on-the-job trai ing, learning from officers who kne how to lead men in combat—frame the rest of his career.

DePuy's personality can best be d scribed as direct, intelligent, decisiv skillful and courageous. MG James Van Fleet, who commanded the 90 Division from October 1944 to Febr ary 1945, called DePuy "one of th most skilled and successful battalio commanders produced by this wa Van Fleet was referring to DePuy courageous leadership of his battalio in such actions as the Ardennes.

DePuy did not plan to remain in t Army. He did not expect to be made Regular Army officer, but that's wh happened.

In 1945, DePuy attended a fou month course at the Command a General Staff College. He focused those areas in which he had no pre ous experience, including G-1, G and G-4. Instruction was mainly at t regimental and divisional levels. 1946 and '47, DePuy was doing G work at the Pentagon.

During the Korean War, DePuy w assigned to the CIA. He was und standably vague about what he d

during this period, saying: "We were involved in very active covert operations against China."

In 1953, DePuy attended the Armed Forces Staff College and dismissed the school as "one of the 'brownie points' that you were supposed to get," claiming that he didn't get much out of the course.

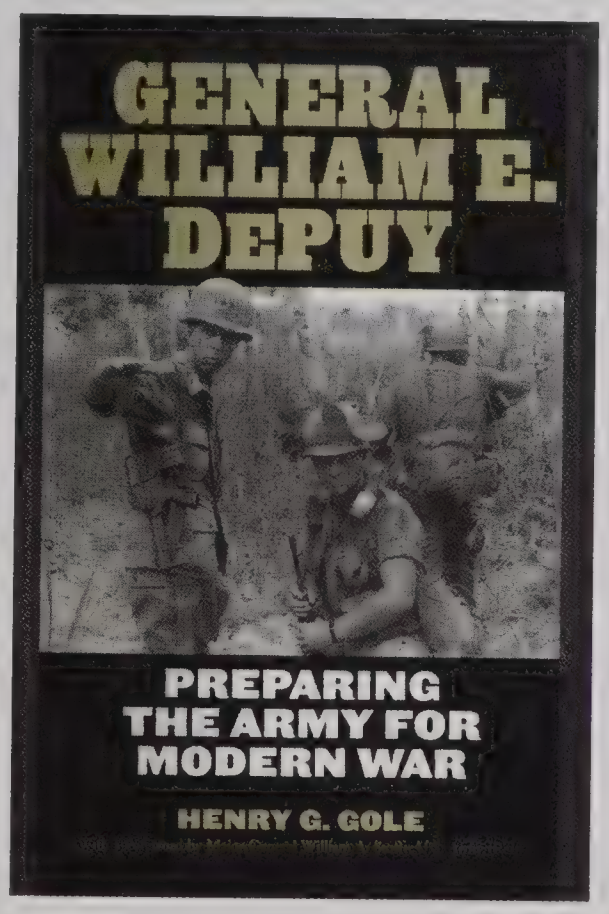
DePuy's strength was that he did not wait for information and knowledge to come to him. He believed that the most effective way to learn was by private study, observing the best at work and experience on the job. Gole writes: "In DePuy's scheme of things, ideas per se are individual accomplishments of the very capable. Self-starters, by definition, are few. Schools were useful for the less driven, the less talented."

After returning from service with troops in Germany in May 1956, DePuy joined the coordination group in the Office of the Chief of Staff. He served in this position until October 1959. This was a big-picture Washington job, one in which DePuy would gain knowledge concerning national policy, national strategy and military strategy. His intelligence and writing skills served him well here. A clear thinker, DePuy would start each project with the question, "What's the concept?" It's amazing that so many leaders at the highest levels of government and the military get themselves and their people involved in details before they understand enough to establish achievable goals.

From 1964 through 1969, DePuy was totally involved with the Vietnam War. His positions included J-3 for GEN William Westmoreland's Military Assistance Command, Vietnam; commanding general of the 1st Infantry Division; and special assistant for counterinsurgency and special activities, Joint Chiefs of Staff.

As early as June 1964, DePuy was already writing that we could not win the war: "We can't *win* but we can *perhaps* keep from losing." In August 1964, DePuy wrote: "There is no longer any chance of winning. It is now a matter of figuring out some alternative to winning. Frankly no one has a clue as to what that could be." Did DePuy?

Gole makes clear that "DePuy regretted that the United States did not view the Vietnam War from a theater perspective that included both Vietnams, Laos, Cambodia and Thailand. The enemy did." The fact is that if we could not isolate the enemy in South Vietnam from his source of supply and support in North Vietnam, we could not win the war.



DePuy thought it was a mistake to keep the Joint Chiefs of Staff out of the decision-making process in Vietnam. Could this situation have been prevented if the Joint Chiefs were in the military chain of command as they were in World War II? Some say the rational position in Vietnam was held by retired general and Ambassador to South Vietnam Maxwell Taylor. Gole makes Taylor's position clear: "An open-ended commitment in Vietnam was not in the U.S. interest. Moreover, a big buildup of U.S. forces would let ARVN [Army of the Republic of Vietnam] 'sign off,' that is, abdicate responsibility."

From March 1966 to February 1967, DePuy commanded the 1st Infantry Division with determination and courage. He demanded that his officers be as competent as he was, and if they were not, many were removed. This raised the question debated in subsequent years: Was this a wise policy or just arrogance?

I spoke recently to retired LTG David R. Palmer about DePuy. On the positive side, he believes that "DePuy was dedicated to the Army, a man who liked stand-up people, and who did not have yes-men around him," but he noted, "DePuy was not willing to give officers a chance to grow and learn from their mistakes."

To his credit, DePuy summarized what happened in Vietnam with clarity and honesty. He wrote in the June 1987 issue of ARMY Magazine: "Our operational approach was to increase the pressure on the other side (size of force, intensity of operations, casualties) in the belief that it had a breaking point. But the regime in Hanoi did not break; it did not submit to our logic." In military affairs, getting the logic right is indispensable.

In June 1973, DePuy took command of Training and Doctrine Command. This was his opportunity to use his skill as a teacher and as a thinker. DePuy was the force behind the revised FM 100-5 and was credited with changing the Army's focus from Vietnam to the 21st century.

The book is loaded with valuable information about GEN William E. DePuy as a military leader. It answers many questions and leaves the reader wanting to know more about the man.

—Robert Previdi

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Historically Speaking

NATO Marks Its 60th Year

By BG John S. Brown
U.S. Army retired

In 1949, the survival of democracy in Europe was no sure thing. Economies were devastated, populations demoralized, and extremists on both the right and the left posed powerful threats in virtually every nation attempting self-governance. The Soviets had snuffed out civil liberties in the countries they occupied, forcibly removed the government of Czechoslovakia and initiated a blockade of West Berlin intended to starve out a population under the protection of American, British and French soldiers. Within the United States, powerful lobbies eschewed further involvement overseas, particularly in the context of "entangling alliances."

In this dangerous hour, a remarkable bipartisan coalition shepherded by Democratic President Harry S Truman and Republican Senator Arthur H. Vandenberg set politics aside to redesign the international responsibilities of the United States. Within a brief span, the Truman Doctrine promised support to "free peoples ... resisting attempted subjugation," the Marshall Plan committed billions of dollars to resuscitate European economies, and American diplomats followed up on the European-initiated Treaty of Brussels to negotiate the North Atlantic Treaty, signed in Washington, D.C., on April 4, 1949. The Republican-dominated Senate ratified the latter Truman administration initiative with 82 votes to 13.

In forming the North Atlantic Treaty Organization, the original 12 member nations—Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the United States—demonstrated a remarkable capacity for adaptation and integration, while preserving the autonomy and independence of each member nation, a hallmark of NATO for 60 years. In 1952, they were joined by Greece and Turkey. Three years later, the Federal Republic of Germany (West Germany) joined as well. This was a seminal event in several respects. The accession of German manpower, maneuver room and industrial wherewithal made it feasible t match the Soviets in a conventional con test, raising the threshold at which nu clear weapons were the only option left. Perhaps more sig nificant to the alliance's long-term purposes, NAT membership marked the redemption of the German peo ple from an authoritarian past—and their acceptance into family of democratic nations.

The NATO ideal was democratic governance, civilia control of the military, civil rights, the rule of law and th role of soldiers as benefactors of the publics they serve NATO membership implied adherence to shared values a much as mindfulness of national defense. American so diers and their brethren were ambassadors of democrac communicating values even as they manned defenses. I 1982, the German pattern repeated itself when Spain she the fascism of Francisco Franco, embraced democracy an was welcomed into NATO.

Geographical restraint to Europe and North America i the alliance's core principle was no accident. In 1949, man European members had colonial holdings that Canada an the United States had no interest in defending. Conversel the United States had had interventions in Latin Americ with which the Europeans would not have wanted to b involved. NATO policymaking has by design been ferve in preserving the autonomy and independence of memb states. Collective interests outside of Europe rarely align a well as they do within Europe, and the military thre within Europe is now much diminished. Stability with Europe enormously enhances the security of the Unite States, and for that NATO deserves much credit.



As a number of foreign dignitaries look on, President Harry S Truman signs the North Atlantic Treaty proclamation on August 24, 1949, in the Oval Office of the White House.



The Berlin Wall, erected in 1961, cut off access between West and East Berlin. Beyond it, the columned Brandenburg Gate, long a symbol of Germany, reopened in 1989, when the wall was demolished and the city reunited.

NATO is about team building amid diversity. The teamork of nations is reflected in the teamwork of multinaonal executive committees, international staffs and comned forces in the field. Crucial features of this teamwork clude transparency in force planning, interoperability d standard operating procedures. NATO force planners gotiate openly among member nations in accordance th agreed procedures to determine the organization, uipment and capabilities of national contributions. Over ne, this transparency has fostered mutual confidence. e pursuit of interoperable equipment, albeit never per-t, greatly enhances the ability of NATO contingents to erate alongside or sustain each other. Standard operatg procedures—and training in accordance with them—ve furthered this capacity for cooperation. During the ld War, shared plans, training and procedures gave the neral deployment plan "layer cake" along the inter-Gerin border credibility as a deterrent. After the Cold War, y made NATO operations such as those in Bosnia and sovo feasible. Perhaps as important, they enabled the efent assembly of coalitions of the willing for operations t some—but not all—member states chose to undertake, h as Desert Storm.

1989, the Warsaw Pact collapsed, and in 1991, the Soiet Union followed. Tired of subjugation, their peoples zed the opportunity to throw it off. NATO's resolute 40-r defense, securing and nurturing open societies that provided alternate examples to communist tyranny, was central to these developments. NATO's promulgation of shared values and teamwork proved crucial to consolidating post-Cold War success.

NATO membership was not loosely given, it was earned. Partnership for Peace (PfP) established apprenticeships wherein militaries born in authoritarian regimes were exposed to the values of soldiers serving democracies. PfP members participated in NATO force planning, training and active operations. They shed bloated militaries of Soviet design and became increasingly integrated into NATO's ways of doing business. Meanwhile, as nations they were gaining experience in democratic governance, observing the rule of law and swearing off border disputes that had confounded them for centuries. In 1999, the Czech Republic, Hungary and Poland were deemed ready and were welcomed into the alliance on its 50th birthday. Since then, Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia have joined, and Albania and Croatia may soon be members as well. Others will follow when the circumstances are right and they are ready.

NATO operations beyond Europe, such as in Afghanistan, are likely to remain problematic. Nations understandably vary in their perception of their stakes in that distant theater. To its credit, NATO has undertaken to operate collectively in central Asia and to refine its capacity to operate outside of Europe. It may be that the NATO standardization that enables efficient coalitions of the willing proves more consequential out of sector than NATO operations per se, but this in itself is a huge advantage. In 60 years, an alliance of free peoples has advanced democratic governance from the threatened fringe of Europe to the continent as a whole. Their numbers have multiplied as others, noting their security and embracing their values, have joined them. Should this pattern continue for another 60 years, the world will indeed be a better place. ★

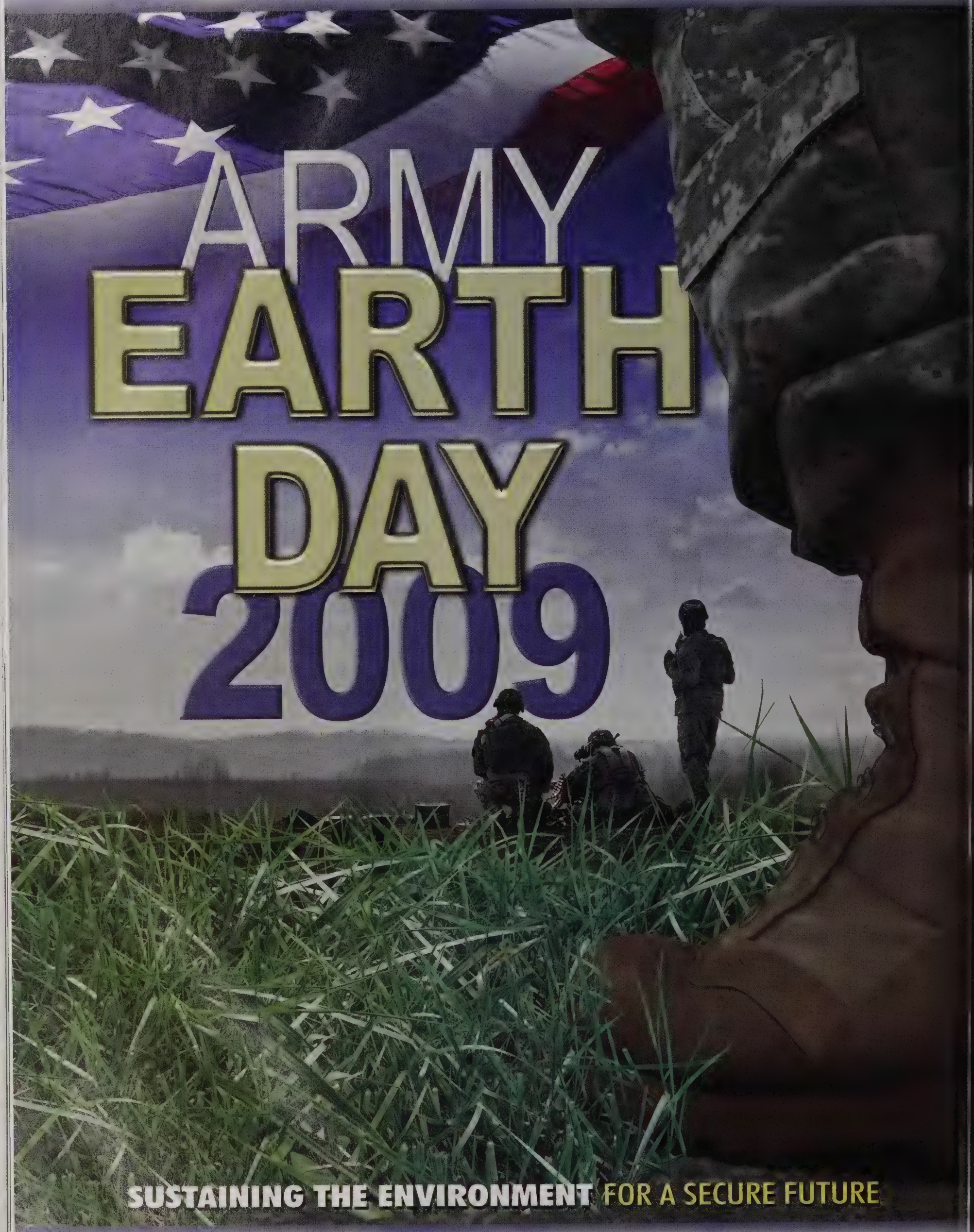
JOHN S. BROWN, USA Ret., was chief of military history t the U.S. Army Center of Military History from December 998 to October 2005. He commanded the 2nd Battalion, 66th rmor, in Iraq and Kuwait during the Gulf War and returned o Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana niversity.

Recommended Reading:

Lindley-French, Julian, *The North Atlantic Treaty Organization: The Enduring Alliance* (London: Routledge, 2006)

NATO Handbook (Brussels: NATO Office of Information and Press, 1995)

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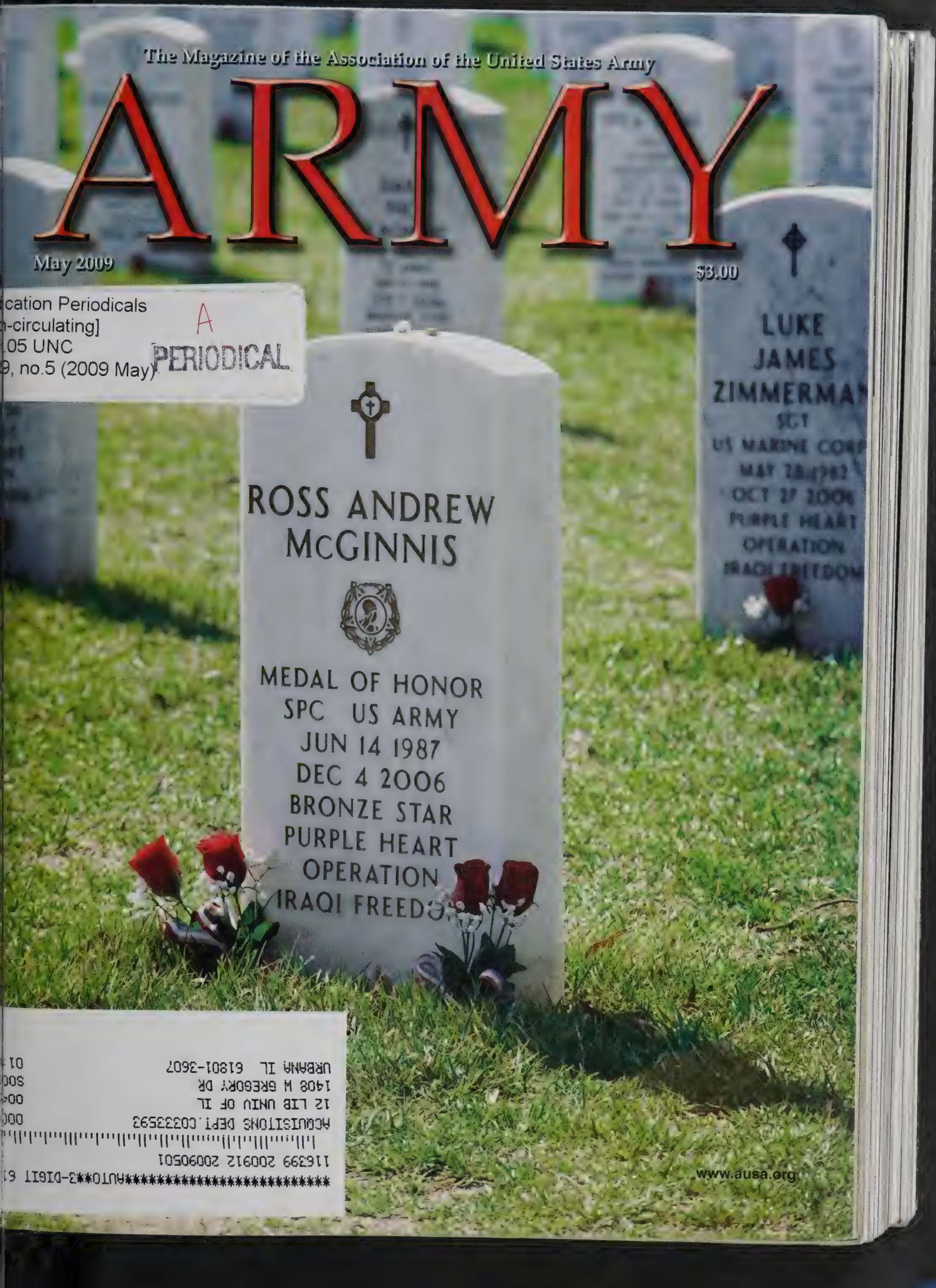
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Letters

'Leadership and Laptops'

■ ARMY continues to be a first-class journal. The March issue seemed to be particularly good, covering a variety of interesting subjects, starting with GEN Kroesen's typically insightful commentary.

One item that really grabbed my attention was CompanyCommand. (That feature alone is worth the price of an ARMY subscription.) If the "Leadership and Laptops on Combat Deployments" article represents the typical plight of platoon leaders who must sacrifice time with their troops in order to produce PowerPoint debriefs, we may be headed for trouble. Nobody questions the need to send information up the chain while it's still hot, but everybody should question a practice that cuts significantly into troop-leading time.

Years ago, hearing that some staffs were spending more time preparing briefing slides than they were preparing the operations plan itself, a few of us proposed that the Army—or parts of it—declare a brief moratorium on PowerPoint, or declare a "PowerPoint-Free Zone." Perhaps swear off the slide-building for a few days, or every Friday, or something like that. Not surprisingly, our suggestion never got off the ground.

If, in fact, the need for computer-generated presentations is diverting inordinate amounts of energy from more important tasks in an operational theater, it is more than a trivial inconvenience: It is a big-time cultural issue.

LTG Walter F. Ulmer Jr., USA Ret.
Moneta, Va.

Officer Shortage

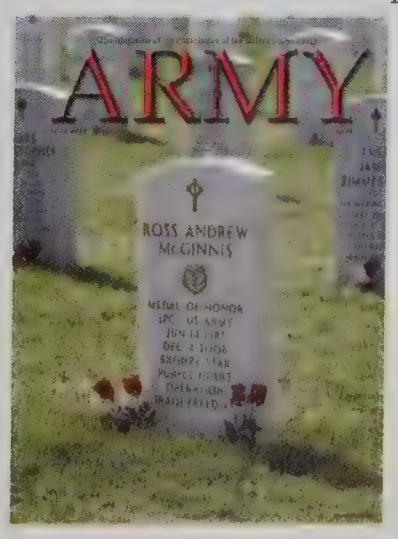
■ In "Front & Center" in the February issue, MAJ George B. Brown III reopened some vital discussion topics regarding the shortage of midcareer officers and the deleterious effects this shortage has on the Army ("The Shortage of Army Officers in Year Groups 1991–97"). This issue requires more than just attention from publications such as ARMY—it requires a top-level review of Officer-Corps professional development that encompasses all aspects of the officer career cycle, from commissioning to retirement or expiration of term of service. Army leadership should act boldly to redesign the current stakeholder-careerist development track in favor of one that promotes the best and brightest sooner and provides merit-based incentives to the best officers at every key decision point in their careers.

As an officer commissioned in my 30s, after receiving an MBA and spending nearly six years in the corporate world, I'm often dismayed at the impersonal way officers are treated by Human Resources Command and the Army as a whole.

The human resources systems currently in place value all officers equal-

This Month's Cover

Memorial Day has special significance in and around Washington, D.C., as thousands of visitors pay their respects to Americans who gave their lives in service to their country. At Arlington National Cemetery the headstone on the cover marks the grave of SPC Ross A. McGinnis (1st Platoon, Company C, 1st Battalion, 26th Infantry Regiment, 2nd Brigade Combat Team, 1st Infantry Division) who was posthumously awarded the Medal of Honor for falling on a grenade to save the lives of four members of his Humvee crew in Iraq in 2006. Dennis Steele's photo essay of Washington, D.C., war memorials begins on page 32.



(Cover photograph by Dennis Steele)

ly, similar to the way one would view numbers of watering cans, widgets or some other countable commodity. One watering can or widget can easily replace another on the bumper of a Humvee. The reality within the Officer Corps and among people in general is that very few are truly excellent and that a mediocre officer is not interchangeable with an outstanding one.

Solely focusing on numbers assumes that any captain, major or lieutenant colonel is equal to his or her peer, particularly if they are from the same year group. Thus the counting of raw numbers and the focus on year-group cohorts absolutely ignores capabilities, performance and value to the organization. This "widgetization" of human-resource management leads to an organization that sends a captain who is fluent in Arabic with an interrogation background to Korea and allows a substandard 2005 year-group captain to receive a retention bonus while the outstanding lieutenant who commissioned three months after him receives nothing.

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited for reasons of style, accuracy or space limitations. Letters should be exclusive to ARMY Magazine. All letters must include the writer's full name, address and daytime telephone number. The volume of letters we receive makes individual acknowledgment impossible. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via e-mail to armymag@ausa.org.

In our current system, nearly 100 percent of officers who stay in the Army (certain special branches excepted) make O-5. Because of attrition, the competition to O-5 is nil, and the current trend shows a significant reduction in competition to the rank of O-6. These attrition trends beg the questions: What are the profiles of officers leaving the service? Are we losing a significant percentage of our top quartile performers? Are we retaining higher percentages of our bottom quartile performers? We don't know because the Army is not actively collecting the data. Without hard data exploring more than just the raw office numbers, the leadership will not have the situational awareness that allows the creation of innovative incentive plans that retain our Army's best and brightest leaders. America's sons and daughters deserve the best leaders our nation can provide, but if those leaders depart as captains, the Army will be a little the poorer for it.

1LT ARI A. COHEN
Sanford, N.C.

Leadership and Technology

■ Regarding the February 200 "Front & Center" article "Leadership Versus Information Technology Management—Where Do We Go From Here?": While LTC Joseph Doty and MAJ T.J. O'Connor make a cursory observation that "technology is an eno



"Quick, advise the Duke that hackers are attacking the system!"

nous force multiplier and will be one of many keys to our success," they eem more interested in pointing out n imaginary disconnect between ffective leadership and the informa- ion technology available to today's ommanders.

In fact, the Army now has an im- ortant opportunity for leaders to fos- er technology-enabled collaborative nvironments throughout their units, hich can greatly increase the com- ander's time available for leading stead of managing information. LTC oty and MAJ O'Connor addressed me of the challenges of information chnology but neglected to mention e apex of the understanding hierar- y: knowledge management (KM), e art that tailors a unit's collabora- ve environment to the commander's eeds. Knowledge management is dis- ssed in the newest version of Field anual (FM) 3-0 *Operations* and in FM 01.1 *Knowledge Management Section.*

An effective collaborative environ- ent can increase board, bureau, cen- r, cell and working group synchro- nization, shorten planning time by promoting real-time collaboration and increase situational awareness. In addition, task tracking, requests for information and significant activities can be effectively accomplished with a comprehensive KM plan. All of this improved information support can be available to commanders wherever they have connectivity. Commanders working in close collaboration with their KM officer can communicate their guidance and receive essential information in the most efficient and effective manner.

Now that leaders are supported by effective collaborative environments, they are not tied to a tactical operations center. If the commander has clearly communicated the mission and intent, developed critical information requirements and articulated potential decision points, he or she will have the confidence to spend time leading, doing battlefield circulation and allowing the staff to do its job.

LTC HOWARD R. CUOZZI, USA RET.
Elizabethton, Tenn.

VUIT-2

■ The January 2009 "Soldier Armed" article about the video from unmanned aerial systems for interoperability teaming-level 2 (VUIT-2) was of special interest. Speaking on behalf of the first VUIT-2 equipped battalion operating in a combat environment, I can say that we are excited and enthusiastic about this new capability. From a technological standpoint, VUIT-2 is proven to work well, and we concur that the Army needs to continue to refine this capability as we move towards the Block III Apache.

Tactically, most of our success in using the VUIT-2 has been for target handovers between Apache helicopters and maneuver battalions. Being able to transmit Apache sensor video to soldiers on the ground through the One System Remote Video Terminal (OSRVT) has been the biggest money-maker for us. VUIT-2 is not without its challenges, however. Maneuver battalions are equipped with a limited number of OSRVTs. This, coupled with the limited range over which Apache sen-

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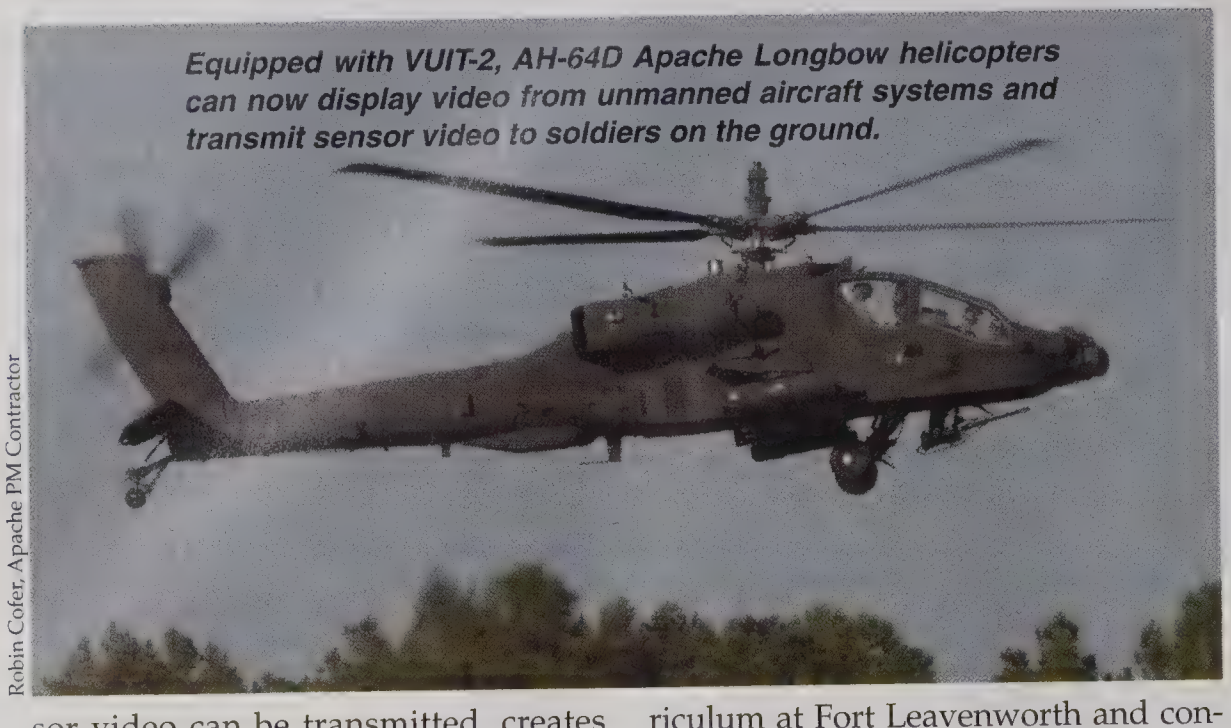
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Equipped with VUIT-2, AH-64D Apache Longbow helicopters can now display video from unmanned aircraft systems and transmit sensor video to soldiers on the ground.

Robin Cofer, Apache PM Contractor

sor video can be transmitted, creates integration challenges that must be creatively and cooperatively overcome. OSRVT software upgrades and operator proficiency are not where they should be either, requiring additional training in theater to better integrate this new capability.

We are working closely with the supported brigade combat teams, program managers, the Aviation Applied Technology Directorate and the Aviation Technical Test Center to fully optimize this valuable new capability. With each mission, our aviators are exploring new and ingenious ways to employ the VUIT-2. We look forward to providing candid feedback as we continue to integrate the VUIT-2 in combat operations throughout the rest of our deployment.

LTC MIKE SLOCUM
Commander, 1-10 ATK, Iraq

'Officer Education at CGSC'

■ LTC Edwin L. Kennedy Jr., U.S. Army retired, did a fine job raising awareness of the importance and value of the staff ride in the education of Command and General Staff College (CGSC) students ("Officer Education at CGSC," February). Credit should also be given to Arthur L. Wagner, Eben Swift and William Glenn Robertson for the history and development of the staff ride at Fort Leavenworth, Kan. Wagner, an instructor at Fort Leavenworth in the 1880s and 1890s, originally conceived the staff ride. A protégé of Wagner, Swift refined the concept, added a staff ride to the curriculum at Fort Leavenworth and conducted the school's first staff ride in 1906 (the staff ride that is mentioned at the beginning of COL Kennedy's article). Robertson led the revival of the staff ride at the Combat Studies Institute (CSI) and CGSC in the 1980s. In 1983, he led the first of CGSC's revived staff rides to Chickamauga, Ga., and in 1987 he wrote the Army's doctrine on the conduct of staff rides, *The Staff Ride*.

By Training and Doctrine Command (TRADOC) regulation, CSI is the Army's proponent for staff rides, and the mission of CSI's staff ride team is to develop and perform rides for TRADOC organizations and the U.S. Army at large, as well as to provide information and guidance to U.S. Army units and agencies on how to conduct staff rides. As part of this mission, CSI performs multiple rides for CGSC. (Both CSI and CGSC are subordinate organizations of the Combined Arms Center at Fort Leavenworth.) Most of these rides are conducted as part of CGSC's advanced application program courses (commonly known as electives) and are conducted for both annual CGSC classes in the fall and spring terms and for the School for Command Preparation, involving instruction to more than 250 students a year. The courses taught are the Chickamauga Staff Ride; the Sioux Wars Staff Ride; the Normandy Staff Ride (in conjunction with the CGSC student exchange program with France); the Gettysburg Staff Ride (conducted for more than 100 international military students); Operation Iraqi Freedom (a virtua staff ride conducted with computer generated terrain views); Operatio Anaconda (also a virtual staff ride and Westport (for officers seeking th historian 5X additional skill ident fier). In short, CSI provides CGS with a vast array of staff rides—th most extensive staff ride program i the Army's school system.

CSI stands ready to execute the r mainder of its staff ride mission and otherwise assist the Army at large, well as other services, governme agencies and allied armed forces. CS staff ride team is prepared to execu more than 30 rides in the United Stat and Europe, covering campaigns ar battles from the American Revoluti to the conflicts in Iraq and Afgha istan. It can also assist units in prepa ing and conducting their own st rides. In sum, the CSI staff ride tea provides staff ride assistance to ma organizations and is ready to he others. For more information, plea see the CSI web site: http://usac army.mil/CAC2/CSI/.

MAJ CURTIS S. KING, USA RET., PH.
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Washington Report

Gates Announces 'Reform Budget' for FY 2010

Announcing a fiscal year (FY) 2010 defense budget he says is "crafted to reshape the priorities of America's defense establishment," Secretary of Defense Robert M. Gates called for eliminating the Army's Future Combat Systems (FCS) armored vehicles program, increasing rotorcraft and special operations capabilities, completing the growth of the Army and caring for the all-volunteer force. Releasing DoD's request before the White House submits a budget to Congress is unorthodox, but Secretary Gates told reporters that President Obama agreed to the approach because of the scope and significance of the changes.

"This is a reform budget," said Secretary Gates, "reflecting lessons learned in Iraq and Afghanistan, yet also addressing the range of other potential threats around the world, now and in the future."

Although the restructuring of the FCS program was the last of Secretary Gates' announcements, it loomed large among the program cuts. He recommended the cancellation of the vehicle component and the reevaluation of requirements, technology and approach followed by a relaunch of the Army's vehicle modernization program, which includes a competitive bidding process. DoD will "retain and accelerate the initial increment of the program to spin out technology enhancements to all combat brigades," he said, but the vehicle part of the program is currently estimated to cost more than $87 billion, and he is not convinced the lighter armored FCS vehicles are optimal for close-quarters combat in Iraq and Afghanistan.

Secretary Gates spoke first about troops and families, making it clear that people take top priority in his recommendations. In addition to completing the Army's end-strength growth, he called for steady growth in medical research and development and proper funding for health care. He also requested increased funding for improvements in child care, spousal support, lodging and education.

Another recommendation particularly affecting the Army is DoD's proposal to spend $500 million more in the base budget than it did in FY 2009 to field and sustain more helicopters, which are in urgent demand in Afghanistan. The primary limitation on helicopter capacity is shortages of maintenance crews and pilots rather than airframes, Secretary Gates noted. "Virtually all the money, o most of it, is going to go to accelerate the training of heli copter crews and pilots," he said. In addition, he recom mended increasing special operations personnel by mor than 2,800, or 5 percent, and buying more lift, mobility an refueling aircraft for Special Forces use.

The growth of Army brigade combat teams, said the Sec retary, will stop at 45 rather than 48, with the planned in crease in end strength remaining at 547,000. He believe such a measure will thicken the ranks, ensuring that uni have enough personnel to deploy, and said that it does n preclude the Army's resuming the increase in force structu at some later point after stop loss is phased out and dwe time is increased.

Secretary Gates expects criticism of the budget. "Som will say I am too focused on the wars we are in and n enough on future threats," he acknowledged, but he a serted that "the allocation of dollars in this budget definite belies that claim." Secretary Gates noted that about 10 pe cent would be for irregular warfare; about 50 percent for tr ditional, strategic and conventional conflict; and about percent for dual-purpose capabilities. "I'm not trying have irregular capabilities take the place of the conventior capabilities," he said. "I'm just trying to get the 'irregula guys to have a seat at the table."

Stop Loss to End. In a news briefing at the Pentagon March, Secretary of Defense Robert M. Gates announce phased plan to end the unpopular program called st loss, which involuntarily extends soldiers' service time units deploying to combat areas. In addition, soldi stop-lossed since October 1, 2008, began receiving mon ly compensation of $500 in April. The law allowing t implementation of stop loss has not changed, and the S retary of Defense retains the authority to use the pol



Surprise visit. *While Secretary of Defense Robert M. Gates announced his defense budget reform for fiscal year 2010, President Barack Obama paid a surprise visit to troops at Al Faw Palace on Camp Victory, Iraq, in April.*



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again in future emergency situations.

The Army Reserve will begin mobilizing units without employing stop loss in August; the Army National Guard will start in September. Active duty Army will deploy its first unit without using stop loss by January 2010.

Currently, some 13,000 soldiers are serving under stop-loss orders. About 7,300 of them are active duty soldiers, more than 4,400 are in the Army National Guard and approximately 1,450 are in the Army Reserve. Secretary Gates said the goal is to halve the number of soldiers serving under stop loss by June 2010 and reduce it to near zero by March 2011. The reduction of troops in Iraq and the increased size of the Army are among the factors allowing the Army to end stop loss.

LTG Michael Rochelle, deputy chief of staff for personnel, G-1, told reporters that eligible soldiers who are no longer under stop-loss orders will receive a lump sum payment in May and June. The payments are tax-free for soldiers in the war zone. They are funded for fiscal year 2009—through September 30, 2009—and future funding is under discussion.

LTG Rochelle also said the Army will formulate a policy that offers new incentives to encourage soldiers to stay with their units for the duration of their deployments. Those incentives could include monetary awards or the option of extending service for only the duration of the upcoming deployment.

Army Addresses Suicides. The suicides of four Army recruiters from the Houston, Texas, recruiting battalion between January 2005 and September 2008 prompted the personnel subcommittee of the House Armed Services Committee to hold a hearing on suicides and suicide-prevention programs throughout the armed forces in March. GEN Peter W. Chiarelli, Vice Chief of Staff of the Army, testified before the subcommittee.

Although suicide-prevention programs have expanded recently, the rate of suicide in the military continues to mount; 2008 was the fourth straight year of increases. The Army's suicide rate has more than doubled since 2004. GEN Chiarelli testified that in 2008 there were 140 soldier suicides, a figure that includes seven unconfirmed cases still under review. The figure, he said, is an all-time high for the Army, a confirmed rate of about 20 suicides per 100,000 people compared to a national average of 11 per 100,000. The rising trend in suicides has continued in 2009.

GEN Chiarelli, who was charged with developing a plan to reduce the number of suicides in the Army, told the subcommittee that Army efforts are focused on mitigating the stress that may affect the suicide rate. He reported that an Army-wide stand-down held in January to address the problem is being followed by a chain-teaching program being conducted into June that will allow leaders to communicate with every soldier.

The Army recognizes, said GEN Chiarelli, that addressing the suicide problem will require a team effort across all Army components as well as cooperation with partners such as the Department of Veterans Affairs and the National Institute of Mental Health. He said the Army is also working on removing the stigma attached to seeking mental health treatment. Soon after testifying, GEN Chiarelli traveled to seven installations to gather personal feedback from soldiers and their families. He is scheduled to present his findings to DoD in June.

Ambassador to Afghanistan Confirmed. President Barack Obama nominated and the Senate confirmed LTG Karl W. Eikenberry in April as ambassador to Afghanistan. LTG Eikenberry will retire from the Army to accept the position. Since 2007, LTG Eikenberry has served as the deputy chairman of the North Atlantic Treaty Organization Military Committee in Brussels, Belgium. He was commander of the Combined Forces Command-Afghanistan from May 2005 to January 2007. LTG Eikenberry has a good relationship with Hamid Karzai, the Afghan president, and his close ties with European allies could mean more support to the mission.

LTG Eikenberry was one of the first to warn of a resurgent Taliban and the need to keep Afghanistan from regressing into anarchy. Appearing before the House Armed Services Committee in February 2007, he warned that the insurgency focused in southern Afghanistan had reconstituted itself. He championed building the Afghan army and security forces, and he emphasized that "al Qaeda and Taliban leadership presence inside Pakistan remains a very significant problem" that must be satisfactorily addressed if we are to prevail in Afghanistan.

A graduate of the U.S. Military Academy, LTG Eikenberry holds master's degrees in East Asian studies from Harvard University and in political science from Stanford University. His operational posts include service as commander and staff officer with mechanized, light, airborne and Ranger infantry units; he has also served in various strategy, policy and political-military missions.

LTG Eikenberry will replace career diplomat William Wood, who has served in Kabul since April 2007, joining Commanding General of Central Command GEN David H. Petraeus and Commander of U.S. Forces Afghanistan GEN David D. McKiernan as one of the administration's most influential voices on Afghanistan policy.

WRAMC Celebrates 100 Years. On April 27, Walter Reed Army Medical Center kicked off a weeklong celebration in honor of the medical center's century of care for U.S. servicemembers and their families. Beginning with a volunteer agency appreciation ceremony, the events included a history symposium chronicling key events in the 100-year service of the medical center and a centennial ball honoring past Walter Reed commanders, physicians and nurses. The largest DoD military hospital, the medical center is named in honor of MAJ Walter Reed, an Army physician who, in 1900, led the team in Cuba that confirmed that yellow fever is transmitted by mosquitoes rather than through direct contact. The 80-bed Walter Reed General Hospital opened in 1909.

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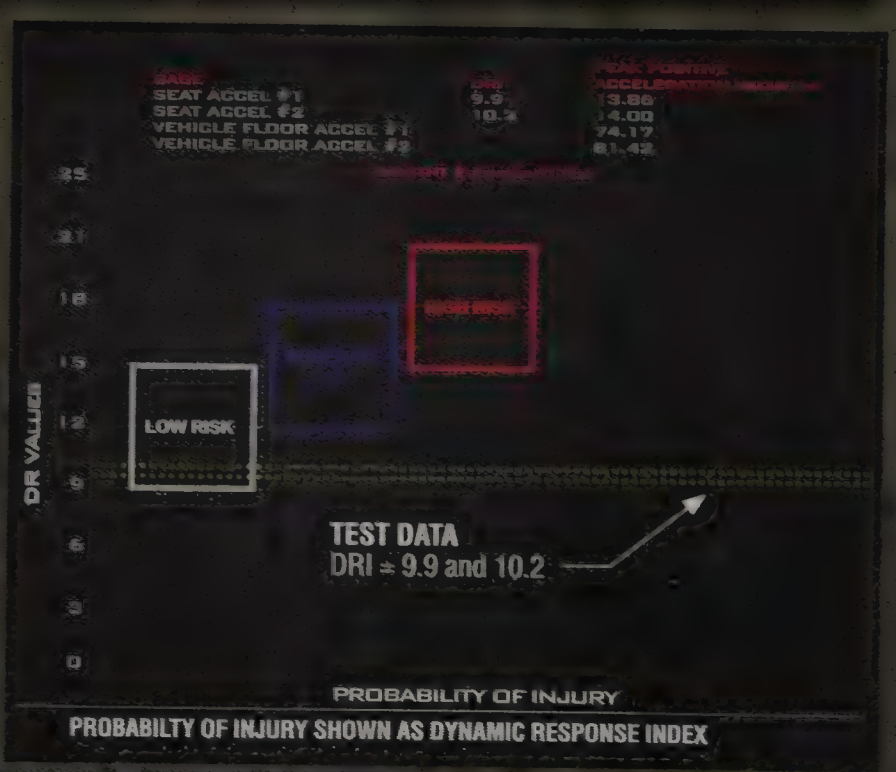
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News Call

New Afghanistan Strategy: Regional and Comprehensive

A review of U.S. strategy in Afghanistan by the Obama administration in April emphasized that success there calls for a regional approach that includes diplomatic, economic and military resources—an assessment American commanders have long articulated.

President Obama announced that the clear and focused goal is "to disrupt, dismantle and defeat al Qaeda in Pakistan and Afghanistan and to prevent their return to either country in the future."

Central Command Commander GEN David H. Petraeus elaborated on the new policy in testimony before Congress in April. "Afghanistan and Pakistan comprise a single theater that requires comprehensive whole-of-government approaches that are closely coordinated," he said. Military forces alone are not sufficient, he said. "It is essential that the respective departments, State and USAID [U.S. Agency for International Development] foremost among them, be provided the resources necessary to implement the strategy."

In April, the commander of NATO's International Security Assistance Force and U.S. Forces Afghanistan, GEN David D. McKiernan, told *USA Today* that the Afghan police are "the critical link" in efforts to suppress insurgents. The new goal is to achieve an Afghan police force of 82,000 and an Afghan army of 134,000 by 2011.

President Obama acknowledged that U.S. commanders in Afghanistan have been requesting additional trainers for years. "Later this spring," he said, "we will deploy approximately 4,000 U.S. troops to train Afghan security forces." About 3,300 soldiers from the 4th Brigade Combat Team, 82nd Airborne Division, Fort Bragg, N.C., along with some 700 training and support personnel will deploy to Afghanistan in the spring and summer to aid in the training and development of the Afghan national security forces. The unit was originally slated to deploy to Iraq.

Every American unit sent to Afghanistan will be partnered with an Afghan unit. GEN Petraeus noted that it is vital that forces there "be seen as good guests and partners, not as would-be conquerors or superiors," and he noted that GEN McKiernan had recently issued counterinsurgency guidelines that explain how forces should operate.

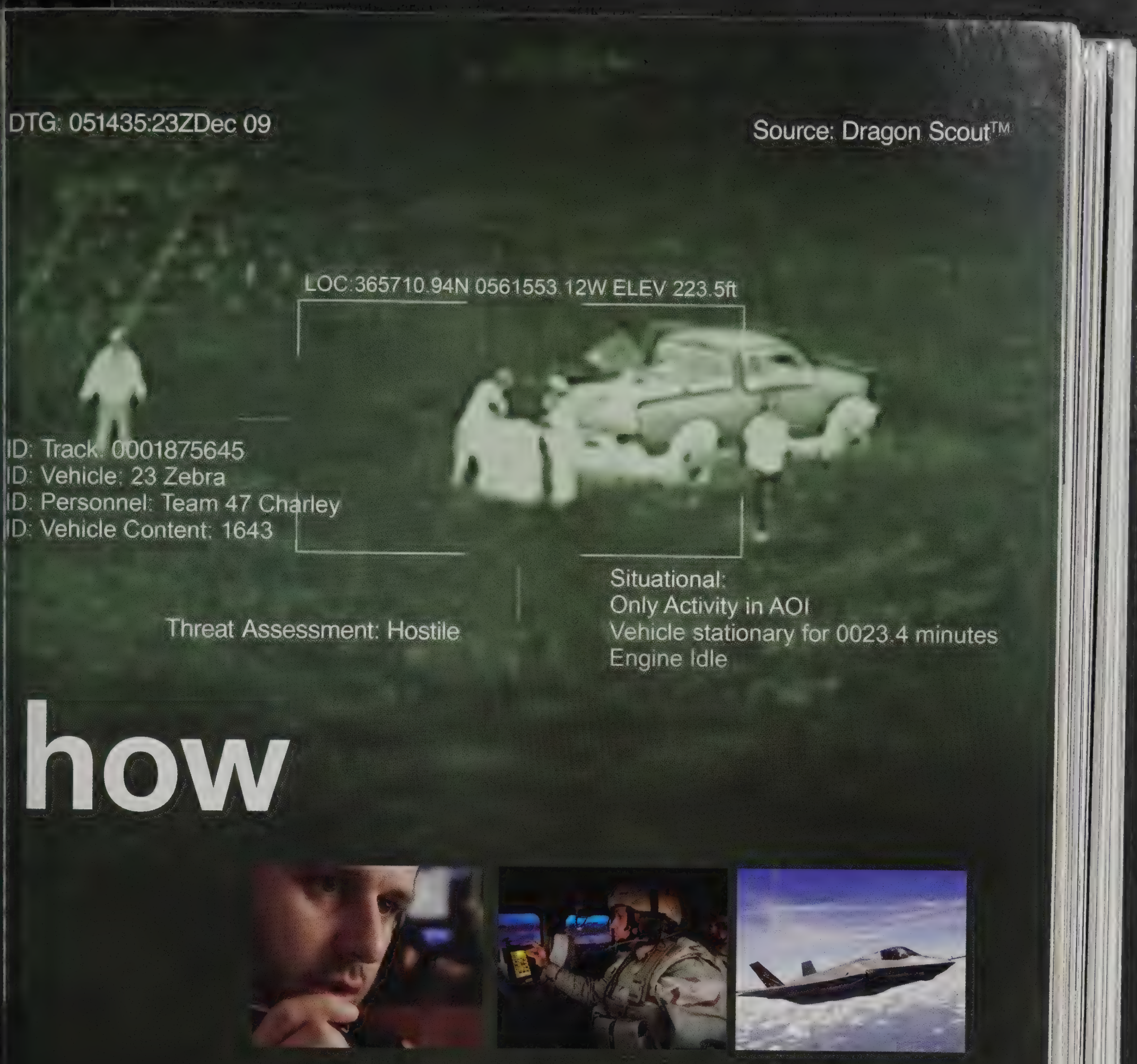
By the end of summer, according to GEN Petraeus, the United States will have more than doubled the number of its forces on the ground in Afghanistan since the end of 2008. He reminded Congress that the fight there is going to get harder before it gets easier. GEN Petraeus has received a request for 10,000 more troops in Afghanistan for 2010, which he forwarded to the Pentagon. A decision does not have to be made on those forces until the fall.

The U.S. military will focus on two main areas in Pakistan. It will expand its partnership with the Pakistani military and provide training, equipment and assistance to help it build counterinsurgency capabilities there, and it will expand exchange programs to build stronger relationships with Pakistani leaders. The U.S. will also promote closer cooperation across the Afghanistan-Pakistan border.

The Pentagon is proposing to spend some $3 billion over the next five years to train and equip the Pakistani military to encourage Pakistan's fight against insurgents there. The Pakistani counterinsurgency capability fund is designed, said GEN Petraeus, "to help the Pakistani forces develop specific … counterinsurgency capabilities." President Obama, who announced the funding with his new strategy, warned that "we will not, and cannot, provide a blank check. Pakistan must demonstrate its commitment to rooting out … the violent extremists within its borders."



Soldiers of the 100th Brigade Support Battalion (BSB) board a C-130 aircraft as they prepare to leave for Afghanistan from Joint Base Balad, Iraq, in late March. Beginning in December 2008, the 100th BSB provided logistical support to Coalition forces in western and central Iraq as part of the 3rd Sustainment Command (Expeditionary).



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Linked to the counterterrorism and democracy-building efforts in Pakistan is a plan to provide $7.5 billion in civilian aid over the next five years. "We cannot be just 'hard' or just 'soft'—we must be both," stressed GEN Petraeus. U.S. security efforts will support those to promote political and economic development.

President Obama's new Afghanistan-Pakistan strategy emphasizes more bottom-up approaches in governance and development aimed at district and provincial levels, such as pursuing viable agricultural alternatives to poppy growing and helping Afghan farmers get their products to market. Another change in the policy is a commitment to measuring and evaluating progress, and the administration will design benchmarks that must be met.

U.S. Relieves British. Multi-National Division-Center, headquartered by the 10th Mountain Division (Light) from Fort Drum, N.Y., commanded by MG Michael Oates, recently accepted responsibility for Multi-National Division-Southeast from its commander, British Maj. Gen. Andy Salmon, at a ceremony in the port city of Basra. The 34th Infantry Division, out of Minnesota, will replace 10th Mountain in May. The two divisions now form Multi-National Division-South (MND-S), which will support Iraqi security forces operations throughout nine provinces in southern Iraq.

After six years of deployment in southeastern Iraq, the approximately 4,000 remaining British troops will redeploy by the end of the summer; an estimated 2,000 U.S. troops will replace them, bringing the total number of U.S. troops in southern Iraq to about 3,500. The missions of MND-S, also known as Task Force Mountain, include assisting with the training and transitioning of Iraqi security forces and helping with economic development and governance, as well as increasing security.

LTG Trefry Honored. LTG Richard G. Trefry, U.S. Army retired, recently received a lifetime service award named in his honor. Secretary of the Army Pete Geren presented the first LTG Richard G. Trefry Lifetime of Service Award to the former Army Inspector General (IG) for his service in the Army and his accomplishments as a retiree.

LTG Trefry spent 40 years in uniform and more than 25 as a civilian military adviser and contractor. During his six-year tenure as Inspector General of the Army, LTG Trefry identified and corrected system failings and deficiencies, thus transforming the annual IG inspection. He was known as "the conscience of the Army." At age 85, he is currently the program manager of the Army Forces Management School at Fort Belvoir, Va., and is also a senior fellow with the Association of the U.S. Army's Institute of Land Warfare.

In the future, the award—a medal with LTG Trefry's image and a large plaque with the recipient's name engraved on a brass plate that will be permanently displayed at the Pentagon—will be presented to individuals who are current or former members of the Army or current or former Department of the Army civilians.

BRAC 2005 Update. Base Realignment and Closure (BRAC) 2005, unlike previous rounds of BRAC, consists of a number of major realignments of personnel as well as some closures. BRAC 2005 will close five headquarters installations, three chemical depots, four ammunition plants, 176 Army Reserve and 211 Army National Guard facilities and create training centers of excellence, centers of excellence, joint technical and research facilities, and

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from March 1 to March 31, 2009. All names have been released through the Department of Defense; families have been notified.

SGT Christopher P. Abeyta, 23
SPC Norman L. Cain III, 22
PFC Patrick A. Devoe II, 27
PFC Adam J. Hardt, 19
SPC Simone A. Robinson, 21
SPC Robert M. Weinger, 24

Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from March 1 to March 31, 2009. All names have been released through the Department of Defense; families have been notified.

SGT Jose R. Escobedo Jr., 32
SSG Raphael A. Futrell, 26
1LT Daniel B. Hyde, 24
SPC Gary L. Moore, 25
SGT Jeffrey A. Reed, 23
PFC Jessica Y. Sarandrea, 22

USAREUR Deployments

Two medical units within U.S. Army Europe will deploy to Afghanistan for up to 12 months this spring as part of the Operation Enduring Freedom fiscal year 2009 force rotation. The headquarters element of the 30th Medical Command, Heidelberg, Germany, is expected to command and control all echelon-above-brigade-combat-team medical units in U.S. Forces Afghanistan as well as coordinate medical policy and work with the Afghan government to build health-care capacity.

The 67th Forward Surgical Team (Airborne), based in Miesau, Germany, will provide surgery in support of battlefield casualties. It will treat U.S., NATO and Afghan troops as well as civilians. The team, one of five airborne surgical teams in the Army, consists of fewer than 30 doctors, nurses and medics. For more information, contact the Europe Regional Medical Command Public Affairs Office at ERMCPAO@amedd.army.mil.

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armed forces reserve centers.

The first BRAC 2005 closure, that of an ammunition plant in Parsons, Kan., built to assemble bombs for soldiers fighting in World War II, occurred in March 2008. Realignments of personnel have already begun. Communications-Electronics Command Life Cycle Management Command and Army Team Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) are moving employees and equipment in phases from Fort Monmouth, N.J., while building a state-of-the-art campus at Aberdeen Proving Ground, Md. More than 350 employees have already made the move from New Jersey; some 800 additional personnel are slated to relocate to Maryland or be hired to work there by the end of this year.

In 2010, employees will begin to move into the $477 million Army C4ISR Campus 1 facility on Aberdeen Proving Ground-North. C4ISR personnel were working in 40 buildings at Fort Monmouth; after the BRAC move is completed, they will work from nine buildings at Aberdeen.

Stephen Colbert to 'Deploy.' Actor/comedian Stephen Colbert plans to take his show, Comedy Central's "The Colbert Report," to the Persian Gulf as part of a USO/Armed Forces Entertainment tour. Colbert will tape four episodes before an audience of servicemembers, who will receive a behind-the-scenes look at how the show is made. In a shout-out clip on the comedian's web site, he told viewers that he could not divulge the exact location: "All I will say is that there will be sand and people who wish we would leave."

The programs will be dedicated to troops stationed around the world and those who have died serving. It will be the first television show in USO history to film multiple episodes in a combat zone and will feature shout-outs from military personnel, an inside look at conditions overseas and four nights of comedy. "The Colbert Report," named "one of the best television shows of the year" by the *New York Times*, airs Monday through Thursday at 11:30 P.M. Eastern Standard Time.

Reserve Retirement Guide. The Army recently published the first retirement guide for Army Reserve soldiers and their families. Written specifically to cover the unique circumstances of Army Reserve retirement, the guide was compiled by the Army Reserve Command and the Army G-1 Retirement Services Division, part of the G-1's Human Resources Policy Directorate.

The 26-page *Army Reserve Non-regular Retirement Information Guide* provides an overview of the reserve component retirement system in chronological order of events in a soldier's career. The publication breaks down the information into 10 chapters and three enclosures—a table of retiree benefits, Tricare benefits and an example of a death notification memorandum.

The guide is being distributed throughout the Army Reserve. It is available online on the Army G-1 Retirement Services web site at http://www.armyg1.army.mil/rso under the "What's New" heading and on the Army Knowledge Online site for retirees—https://www.us.army.mil/suite/page/559734.

Recruiting Visa Holders. The Department of Defense recently launched a yearlong pilot program to enlist up to 1,000 non-U.S. citizen health-care workers and language and culture specialists. The initiative is designed to help the Pentagon maintain a base of about 24,000 doctors, dentists and nurses for the military; currently DoD is short almost 1,000 people.

About 29,000 noncitizens currently serve in the military; some 8,000 legal permanent-resident aliens—who hold State Department-issued green cards—enlist every year. The pilot program expands noncitizen eligibility to people who do not hold green cards but have temporary visas and work permits that allow them to legally live and work in the United States. To be eligible, applicants must have lived in the country for two years.

The program will recruit doctors, nurses and other health professionals

COMMAND SERGEANTS MAJOR CHANGES*



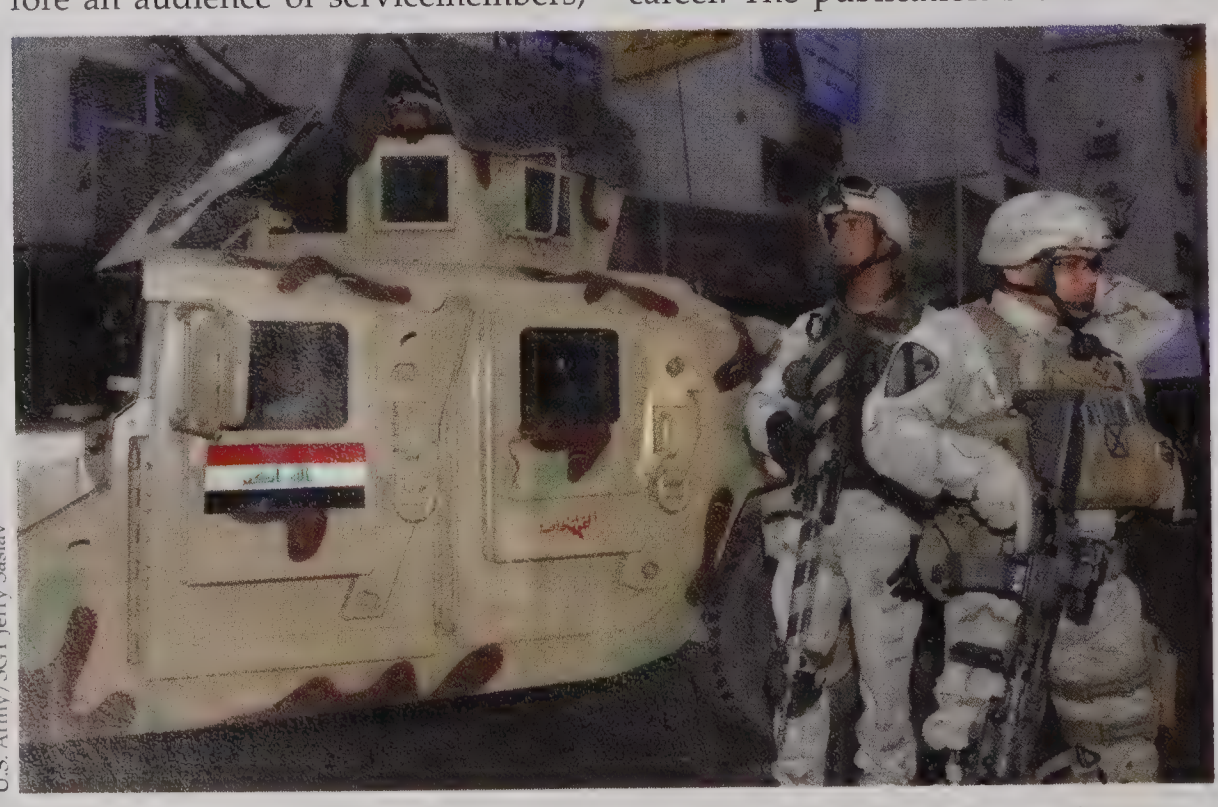
CSM T.L. Glidewell from USACRC, Fort Rucker, Ala., to USAACE, Fort Rucker.



CSM R.W. Young from 194th Armor Bde., Fort Knox, Ky., to USAARMS, Fort Knox.

■ ***USAACE***—*U.S. Army Aviation Center of Excellence;* ***USAARMS***—*U.S. Army Armor School;* ***USACRC***—*U.S. Army Combat Readiness Center.*

**Command sergeant major positions assigned to general officer commands.*



U.S. Army/SGT Jerry Saslav

Correction. *The soldiers above were incorrectly identified in the March "News Call." They are Iraqi soldiers dressed in old U.S. Army uniforms.*

GENERAL OFFICER CHANGES*



MG J.F. Campbell from Dep. Dir. for Regional Ops., J-3, Jt. Staff, Washington, D.C., to CG, 101st Abn. Div. (AA) and Fort Campbell, Ky.



MG R.J. Kasulke, USAR, from Dep. Surgeon General, Mobilization, Readiness and Reserve Affairs (IMA), OSG, Falls Church, Va., to CG (TPU), AR-MEDCOM, Pinellas Park, Fla.



MG C.G. Rodriguez, ARNG, from The Adjutant General, Austin, Texas, to Dir., J-7/Cmdr, SJFHQ, SOUTHCOM, Miami, Fla.

Brigadier Generals: **A.T. Aycock** from CG, SOCKOR, to Dep. CG, IMCOM, Arlington, Va.; **P.M. Aylward**, ARNG, from Dep. Dir. for Anti-Terrorism/Homeland Defense, Jt. Staff, Washington, D.C., to Dir., Jt. Staff, National Guard Bureau, Washington, D.C.; **J.C. Boozer Sr.** from Asst. Div. Cmdr. (M), 1st Armored Div., USAREUR and Seventh Army to Dir. Ops., Office of the Asst. CoS, Instal. Mgmt., U.S.A., Arlington, Va.; **C.A. Bugno**, USAR, from Cmdr. (TPU), 2nd Medical Bde., San Pablo, Calif., to Dep. Cmdr. for Professional Services (TPU), 3rd Medical Deployment Spt. Cmd., Forest Park, Ga.; **R.G. Catalanotti**, USAR, from CG, 98th Training Div. (IET), Rochester, N.Y., to PM-Facilities Scty. Forces, CENTCOM, Riyadh, Saudi Arabia; **J.T. Cook**, USAR, from Cmdr. (TPU), 415th Chemical Bde., Greenville, S.C., to Cmdr. (TPU), 91st Training Bde. (Ops.), Camp Parks, Calif.; **C.D. Luckey**, USAR, Chief, Office of Scty. Cooperation, MNSTC-I, OIF to Asst. to the Chmn. of the JCS for Res. Matters, Office of the Chmn., JCS, Washington, D.C.; **L. Miles** from Dep. CG/Asst. Cmdt., USAIC and Sch., Fort Benning, Ga., to CG, CMATT, MNSTC-I; **H.J. Nowak** from Defense Attaché, Moscow, Russia, (EUCOM), DIA, Russia, to Dep. Dir. for War on Terrorism, J-5, Jt. Staff, Washington, D.C.; **T.T. Semonite** from CG, U.S. Army Engineer Div., North Atlantic, Brooklyn, N.Y., to CG, U.S. Army Engineer Div., South Atlantic, Atlanta, Ga.; **D.L. Smalley**, USAR, from Asst. Surgeon General for Mobilization, Readiness and Reserve Affairs (IMA)/Dep. CG (TPU), AR-MEDCOM, Pinellas Park, to Dep. CG for Professional Services (TPU), 807th Medical Deployment Spt. Cmd., Salt Lake City, Utah; **R.P. Stall**, USAR, from Dep. CG (TPU), 80th Training Cmd. (TASS), Richmond, Va., to Cmdr., (TPU), 98th Training Div. (IET), Rochester, N.Y.; **J.J. Wells**, USAR, Cmdr., 1st Bde. (TPU), 75th Div. (Training Spt.), Houston, Texas, to Cmdr., 7th Army USARC and Dep. Cmdr., 21st Theater Sustainment Cmd.; **J. Woodson**, USAR, from Cmdr. (TPU), 330th Medical Bde., Fort Sheridan, Ill., to Asst. Surgeon General for Mobilization, Readiness and Reserve Affairs (IMA)/Dep. CG (TPU), AR-MEDCOM, Pinellas Park.

■ ***AR-MEDCOM**—Army Reserve Medical Command; **CENTCOM**—U.S. Central Command; **CMATT**—Coalition Military Assistance Training Team; **DIA**—Defense Intelligence Agency; **EUCOM**—U.S. European Command; **IET**—Initial Entry Training; **IMA**—Individual Mobilization Augmentee; **IMCOM**—Installation Management Command; **JCS**—Joint Chiefs of Staff; **MNSTC-I** —Multi-National Security Transition Command-Iraq; **OIF**—Operation Iraqi Freedom; **OSG**—Office of the Surgeon General; **PM**—Program Manager; **SJFHQ**—Standing Joint Force Headquarters; **SOCKOR**—Special Operations Command, Korea; **SOUTHCOM**—U.S. Southern Command; **TASS**—Total Army School System; **TPU**—Troop Program Unit; **USAIC**—U.S. Army Infantry Center; **USAR**—U.S. Army Reserve; **USARC**—U.S. Army Reserve Command; **USAREUR**—U.S. Army Europe.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

specialties in which there is a shortll, as well as people proficient in specific strategic foreign languages and sociated cultures. Health-care professionals must demonstrate proficency in English and commit to at last three years of active duty or six ars in the Selected Reserve. The military needs nurses with a broad range specialties and neurosurgeons and rmatologists to treat servicemembrs returning from Iraq and Afghanian with brain injuries or burns. Ented individuals with special lanage and cultural backgrounds must list for at least four years of active ity. Among more than 30 language skills sought are fluency in Dari, Farsi, Pashto and Kurdish.

Applicants will undergo security screenings and must meet the same standards required of all who enter the military. The pilot program offers a way for applicants to accelerate the citizenship process. According to the Pentagon, there are tens of thousands of health professionals in the United States on work visas who are likely interested in obtaining green cards or becoming citizens. DoD will assess the value of the program after one year.

For more information, visit www.defenselink.mil/news/mavni-factsheet.pdf. ★



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Front & Center

Memorial Day

By GEN Frederick J. Kroesen
U.S. Army retired

On Memorial Day 2009, we will again honor those who have given their lives in the service of our country, citing especially the casualties suffered during the past year. Accompanying the testimonials, expressions of appreciation and the honors bestowed will be the nagging question, "Was it—is it—worth the cost?"

To the pacifists, the peaceniks, the antiwar and antimilitary among the populations of the world, the answer is always: "No, never! The cost in human resources alone establishes conclusively that war is immoral, a waste never justified."

American history seems to say otherwise. The Revolutionary War, the most costly U.S. war in terms of the percentage of the population lost, is still recognized as the greatest contribution ever to individual liberty. We celebrate annually our Declaration of Independence, adopted by the Continental Congress only after years of futile diplomatic effort to alter our relationship with England. It justified the actions of the Minutemen of New England and explained our grievances. It galvanized the nation's willingness to risk "lives, fortunes and sacred honor" to achieve the right to determine our own destiny.

From among the world's most underdeveloped, we grew to be the most powerful, most prosperous and most generous nation—generous to our own and to all others in need. Charges that this outcome was not worth the cost ring hollow when considering the good that has ensued over more than two centuries.

Our Civil War, fought to preserve the union of our people and their states, was also a solution to the long dispute over slavery. It was fought by the Confederacy in the same spirit that energized our revolution—addressing disagreements unresolvable by political means. The cost in total lives lost exceeded all other wars, but the worth of the conflict is reflected in the willingness of the soldiers of both armies to support the aims of their political leaders. There is no better testament than the genesis of the so-called colored regiments, volunteer soldiers willing to risk their lives—or worse if they were captured—in order to live free. Their alternative of a lifetime of slavery while politicians floundered in all attempts to change the system made joining the fight more than worth the risk, and the casualties suffered an acceptable cost. For the white population of the North, the dual purposes created a noble cause, which, for the great majority, sustained their willingness to stand the costs. (Reparations for their losses have never been proposed.)

World War II, the most momentous in all of history and the most costly to the world's population, was also the only means of preventing the establishment of world totalitarianism. The extraordinary patience and appeasement of leaders in London, Paris and Washington during the 1930s made headlines and accomplished nothing. Adolf Hitler's plan of world conquest and selective genocide went undeterred by diplomacy. Benito Mussolini invaded Albania and Ethiopia. Hideki Tojo's arrogant atrocities in China and Southeast Asia only grew in volume and viciousness as news of the rape of Nanking reached the world. War—costly, wasteful and imperfectly waged—prevented the death of freedom in much of the world. War was a priceless contribution more than worth the costs, as tragic as they were to both the military forces and the civil population.

We have fought other wars and many skirmishes that have cost lives. Those conflicts, always contentious, have been judged as worthy endeavors or necessary actions by most historians. Regardless of the worthiness of our Commander in Chief's intentions, however, our soldiery has performed honorably and admirably on its mission assignments. Treason, mutiny and criminal acts are almost unheard of and are certainly gross exceptions when they have occurred. Obedience



The National World War II Memorial in Washington, D.C., attracts thousands of visitors annually.

to the will of the President has been the norm, disagreement or second guessing by military leaders seldom publicly exposed and heroism the natural outgrowth of our battlefield crises.

Soldiers, sailors, marines, airmen and Coast Guardsmen and women—our honored dead—made that happen. Their legacy is a population living in freedom; their charge is that we, the living, guarantee a continuation of that legacy for coming generations. We need only respect and understand that the great decisions of history have been decided mostly by war and by the soldier, aptly presented and widely distributed by that famous marine, Father Denis Edward O'Brien: *It is the soldier, not the reporter, who has given us freedom of the press. It is the soldier, not the poet, who has given us freedom of speech. It is the soldier, not the campus organizer, who has given us freedom to demonstrate. It is the soldier, not the lawyer, who has given us the right to a fair trial. It is the soldier, who salutes the flag, who serves beneath the flag and whose coffin is draped by the flag, who allows the protester to burn the flag.*

May those we honor again this year glory in the truth of those words. □

__GEN Frederick J. Kroesen__, USA Ret., is a former commander in chief of U.S. Army Europe and a senior fellow of AUSA's Institute of Land Warfare.

For How Many Wars Should U.S. Forces Prepare?

By Richard Hart Sinnreich

In the unaired portion of an interview in March with National Public Radio's Robert Siegel, Defense Secretary Robert M. Gates had this to say about future defense planning: "Our military planning for a number of years—and I would say going back at least 20 years—has been to have the ability to fight two major combat operations simultaneously."

He added, "I think one of the central questions that this department will face in the Quadrennial Defense Review, which will begin shortly, is whether that model makes any sense in the 21st century."

Actually, multiple-war planning scenarios go back nearly 40 years, to the two-and-a-half wars of the Johnson administration. Back then, everyone understood where the two were expected to be: Europe and Korea. The "half" war was simply a hedge against an unforeseen but presumably much smaller military contingency.

Vietnam pretty much put the quietus to the two-and-a-half war model, however, and during the Nixon administration, it was revised downward to one-and-a-half wars. That was less because the threat had changed than in tacit acknowledgement that the all-volunteer force adopted in the aftermath of Vietnam would never suffice to cope simultaneously with two major conventional military commitments.

Instead, military planners spoke of "swinging" forces from one such commitment to another. Hence the half-war in the policy simply was another way of saying that, should two major conflicts erupt at the same time, forces committed to one of the two would just have to hold until mobilization or redeployment from the other made reinforcements available.

Neither of those policies really was a strategy at all. Both were force-sizing models, a way of justifying active military end strengths and the defense budgets needed to pay for them. In contrast, the "two major regional contingencies (2-MRC)" planning framework that eventually succeeded them really did have a strategic rationale, and a reasonably cogent one at that.

In essence, the argument was that commitment of U.S. forces to counter aggression in one region of the world should not simply invite aggression in another. The First Gulf War was the only test case, but by the time it broke out, the Soviet Union was history and redeployment of Europe-stationed forces to the Persian Gulf essentially had become risk-free.

Note, however, the planning predicate: to counter aggression. The presumption was that the United States would never initiate a major conflict. That presumption, of course, went out the window with the Bush administration's adoption of a preventive war strategy. Meanwhile, during the previous eight years of the Clinton administration, active Army end strength had dropped from nearly 800,000 to under 500,000.

The result shouldn't have surprised us. Diminished for practical purposes to a one-and-a-half war force, we have found ourselves since 2003 engaged in two major wars. Only one could be resourced adequately without conscription, and the other thus paid a price that now has become dismally apparent.

When military commitments and the forces available to execute them get out of balance, only two choices remain: Increase the force or reduce the commitments. We've already begun to do the first, but given a massive recession that appears unlikely to end soon, there are limits to how much defense budgets and the forces they buy can grow.

That's especially true with respect to the high-tech capabilities on which, to a considerable extent, the 2-MRC strategy relied, until our unhappy experience in Iraq and Afghanistan reminded the "shock-and-awe" crowd of the penalties associated with going to war with insufficient ground forces.

The other alternative is to reduce our strategic commitments. Barring a radical alteration of the new administration's recent deployment decisions, not much can be done while Iraq and Afghanistan remain on our plate. In the near term, for better or worse, we're strategically committed.

The more important question from a planning perspective, therefore, is how we will balance future commitments and capabilities. At the very least, we ought to revisit the degree of certainty in response to which we should be willing to go to war.

Happily, there are indications that we may do that. In a second interview with PBS in March, Secretary Gates noted that "one of the biggest lessons learned in [Iraq] is this, if you are going to contemplate preempting an attack, you had better be very confident of the intelligence that you have," adding, "I think that ... will make any future President very, very cautious about launching that kind of conflict."

That would be a relief. So also would be greater realism about the character and degree of military force required to achieve any worthwhile political objective. Both, however, leave unanswered two even more vital strategic questions—not when we will fight or with what, but rather, on what provocation and to what purpose. Until we resolve those questions, debating how many wars to plan for is a waste of energy. □

***Richard Hart Sinnreich** writes regularly for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the March 15, 2009* Lawton Constitution *and is reprinted by permission of the author.*

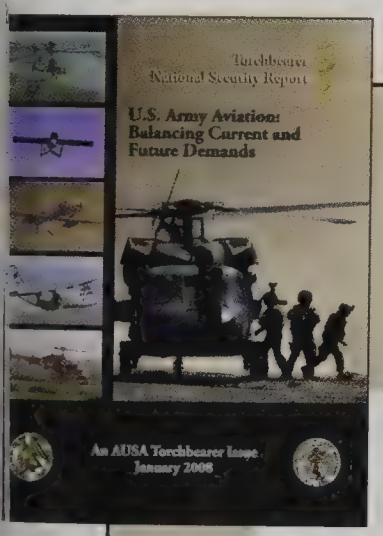
Resurrecting *Posse Comitatus* in the Post-9/11 World

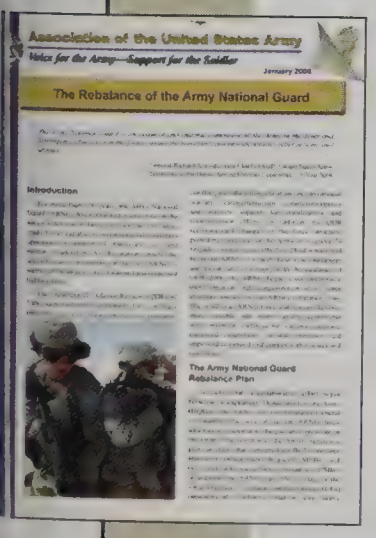
By COL Craig Trebilcock

"The Posse Comitatus Act is dead," declared a headline on a political blog recently. At first glance this seems mere hyperbole, an overreaction to the assignment of a U.S. Army Infantry brigade by the Bush administration to homeland security operations in October 2008. More recently, Military Police and the provost marshal from Fort Rucker, Ala., were deployed in south Alabama following mass murders there in March. Left unabated, this policy may foreshadow where current trends are leading.

Posse comitatus means "power of the county," and while it reflects the inherent power of the old-West county sheriff to assemble a posse of able-bodied men to supplement law-enforcement assets and thereby maintain peace, it was enacted in response to the growing politicization of the Army during the Reconstruction era, when federal troops were asked, among other things, to enforce post-Civil War policies in the South. The language of the Posse Comitatus Act is brief but to the point: *Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both.*

It is equally important to examine who is precluded from domestic law-enforcement activity under Posse Comitatus as it is to determine who is not bound. Specifically, the National Guard, when operating in Title 32





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state-controlled status, and the U.S. Coast Guard are not prohibited from a direct law-enforcement role. The Coast Guard may make arrests to enforce maritime law, and the National Guard may arrest and detain civilians—when its orders from the state governor authorize such activity in the interest of public safety/security—without violating Posse Comitatus.

Over time, there have been many historic and statutory exceptions to the Posse Comitatus Act. Indeed, in the last two decades of the previous century, the Department of Defense used the Navy to interdict drug smuggling, stationed marines on the border with Mexico to catch smugglers and routinely utilized federal military personnel as a security supplement at major civilian sporting events, such as the Olympics. Following the attacks of 9/11, the Posse Comitatus Act appeared to have lost all relevance. That and the political heat President Bush took for a slow relief effort following Hurricane Katrina left the Bush administration frustrated with the limits it perceived as unduly restricting the President's use of the military in homeland security operations. To remedy this "defect," the 2007 National Defense Authorization Act was signed into law by President Bush in September 2006, containing language written by the administration that vastly expanded presidential authority under the Insurrection Act.

The Insurrection Act is an exception to the Posse Comitatus Act, allowing the President to use the active Army—and other military branches—to restore the rule of law during times of "insurrection, domestic violence, unlawful combination, or conspiracy." The original intent of the Insurrection Act was that when a rebellion against the law reached a point when local and state law enforcement were incapable of responding or when the states themselves rebelled, the President might then intervene, using active duty forces as a federal police force to restore order. While the term *martial law* is frequently overused, and often in the wrong contexts, this scenario described under the Insurrection Act *is* the imposition of martial law because it does not require the invitation of a state's civilian governor.

The Bush amendments to the Insurrection Act were included in the massive 2007 Defense Authorization Act as a bill rider. It changed the broad presidential police powers of the Insurrection Act, expanding their scope to include employment at the President's discretion during "natural disaster, epidemic or other serious public health emergency, terrorist attack or incident, *or other condition* [italics added]." Thus the words of the Posse Comitatus Act still existed within the federal U.S. Code, but the principles underlying it had been outmaneuvered and were effectively dead, buried amid hundreds of pages of a funding bill.

The desire by a President to protect U.S. citizens from lawlessness and violence certainly seems a noble and appropriate use of executive branch authority at first glance. What drew fire against the new Insurrection Act language was its virtually unlimited granting of police power to the President. Under the amended language, the decision of whether circumstances warranted deploying federal troops into the streets, and for how long, was left solely to the discretion of the President. Unlike prior Posse Comitatus Act statutory exceptions, this legislation provided the federal executive with the authority to supersede and replace a state's civilian response to a domestic upheaval, not merely to supplement it.

There were three fundamental power shifts embodied in the amended Insurrection Act. It completely removed the governors' roles as commanders of their state National Guard forces; the requirement for the governor to invite federal intervention was circumvented, allowing the President to send federal forces into a civilian community against the wishes of a state's chief executive even when the situation did not arise out of an insurrection or rebellion; and the provision's vague language permitted the President to utilize this new authority in other conditions of his own definition. It effectively gutted the Posse Comitatus Act's limits against employing active duty troops in a law-enforcement role and replaced it with a "trust me, I know what I'm doing" approach to presidential authority.

Federalism, the sharing of power between the states and the federal government, is a cornerstone ideal of the United States, embodied throughout the Constitution, including in the 10th Amendment: *The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.* When the scope of this power shift was fully recognized by Congress, it had a short political life and was revoked by the 2008 Defense Authorization Act. In so doing, the principles of federalism and the Posse Comitatus Act were resurrected.

Against this background, however, the Bush administration assigned the 1st Brigade Combat Team, 3rd Infantry Division, to the recently created U.S. Northern Command (NORTHCOM) in October 2008, as a "dedicated force to respond to potential chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) incidents in the homeland." Reacting to an outcry of civilian groups who opposed the assignment, NORTHCOM future operations chief COL Michael Boatner made it clear in several interviews and articles that the present mission of the unit "will not be called upon to help with law enforcement, civil disturbance or crowd control."

While these statements are reassuring and no doubt reflect current intent, the Bush administration established a new precedent by integrating active duty combat infantry into the domestic security operations fabric of the United States. The 1st Brigade Combat Team is currently in place under NORTHCOM command, ready for domestic deployment. Future plans call for expansion to include an aviation component, among others.

If this historic policy change is accepted and validated by the Obama administration, a future President may elect to expand or change that internal and CBRNE mission to include civil disturbance operations. Perhaps it is only unfortunate timing, but the concurrent attempt to expand presidenti

uthority in the temporarily amended nsurrection Act with the planning for nd assignment of the 1st Brigade Combat Team to a U.S. operational mission raises legitimate questions about whether the nation is incrementally redefining the role of the military for domestic use without fully weighing the ong-term consequences.

Part of the challenge in establishing policies and force structures for omeland security is that two fundamentally different missions can arise ut of one domestic security situation—the humanitarian response mission and the law-enforcement security ission. As such, the fundamental uestion for current domestic security lanners is, "How does the United tates employ one force package that an perform both domestic missions, necessary?" This is an extension of he perennial challenge to military ommanders who, while recognizing hat soldiers and marines are not civilin policemen, are often called upon y politicians to perform law-enforcement roles domestically and abroad.

There is no doubt that when things go really badly—in terms of a disaster or civil disturbance—the military possesses unique equipment and training capabilities that can lend stability to a fractious situation. But when they created a republic in which the rule of law and civilian control of the military are founding principles, the founding fathers placed tight legal constraints on the standing army's ability to take to the streets and expected such use to end at the earliest possible juncture to restore the status quo.

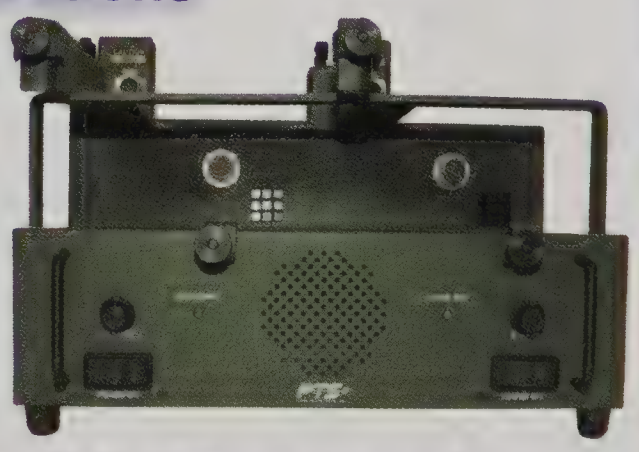
While the military is one of the most admired institutions in the country today, operational planners recognize that unintended consequences can occur when veteran combat soldiers are placed in a position of authority over anxious civilians in a chaotic environment. Tired, stressed teenagers with weapons make mistakes, and when those mistakes are made on the national stage during a domestic upheaval, the consequences will be severe both personally and politically.

It is for these reasons, among others, that Presidents prior to the Bush administration sought to minimize the deployment of active duty military forces within the United States. Combat troops are trained to inflict maximum effective force upon an enemy abroad, not to adhere to domestic police principles of avoiding force in all but the most extreme circumstances. All the rules-of-engagement cards in the world do not change that fact. This reality sometimes blurs at the edges—recent peacekeeping missions have required U.S. troops to replace foreign civilian police—but it should not be forgotten that those turbulent overseas missions are often accompanied with civilian casualties that would not be tolerated at home. Those embracing the premise that police and combat infantry are complementary in their missions have likely not served with a well-honed veteran infantry unit and should carefully consider the political fallout if combat troops act like combat troops when a threat to them arises on a U.S. street during an emergency.

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Times have changed—foreign enemies have attacked our soil. Our security policies, which formerly looked for threats primarily abroad, must also change. Having a military unit's unique logistics capability to respond to a sophisticated weapons of mass destruction attack makes sense to minimize casualties. This fact, however, does not necessarily equate with abandoning the principles underlying Posse Comitatus by assigning an active duty combat infantry brigade to this role.

The National Guard is a key part of the homeland security structure and has historically been the first level of military response to disasters, under the control of the state's governor. Composed of office workers, students and civilian emergency personnel, among others, the state National Guard has a close link with its civilian roots that is weaker with active duty forces. National Guard soldiers train and live in the civilian areas where they would serve during times of crisis. The National Guard's response during a domestic emergency can bring the same military logistical advantages without undermining the state's constitutional role in protecting its soil, without handcuffing an active duty unit's ability to respond when a civilian relief mission evolves into a law-enforcement situation and without undermining the principles of Posse Comitatus.

While every servicemember swears an oath to protect the nation "against all enemies foreign and domestic," the nation's leadership recognizes—due to Posse Comitatus—that the latter phrase does not mean tanks and soldiers regularly patrolling civilian streets looking for those enemies. Our laws provide that only in the most extreme circumstances when all civilian state and local security efforts have failed should the military option be considered, and even then, the response historically begins with the National Guard at the state level.

As such, the Posse Comitatus Act is not merely a law that restricts the utilization of active duty forces within the United States. Rather, it is the statutory expression of historic principles and values that define who we are as a country. The Second Amendment to the Constitution is not just a "right to buy guns" law, as it is often loosely viewed today; the founding fathers recognized the fundamental responsibility of the state and its governor to preserve its territorial security, writing into the Constitution that *a well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.* This provision and the 10th Amendment's reservation of power to the states when not granted expressly to the federal government were both early political expressions of the people's healthy distrust of too much control and power in the hands of a central government. While domestic security needs have changed since 9/11, the historic American discomfort with the use of a standing army for domestic law enforcement survives from these historic roots.

The United States is at a crossroads, where long-term policy decisions as to the proper role of active duty forces in our domestic security structure must be made. Current political leaders developing those policies must weigh whether the threat to our domestic security is sufficiently dire that we are now prepared to weaken the principles of federalism and civil liberties underlying the Posse Comitatus doctrine by integrating active duty troops into our domestic security structure on a permanent basis.

Any decision has the potential to change who we are as a nation and should be made in the open with vigorous public debate between Congress and the President of the advantages and liabilities of such steps. It should not be done surreptitiously, buried in a few lines of statutory language in a telephone book-sized funding bill. It should not be a *fait accompli* through the reassignment of infantry forces on a manning document, as this is, at its core, a political decision. The decision to alter U.S. civilians' historic relationship with their armed forces by expanding the mission of active duty forces to include deployment to our streets merits fresh review by the President and Congress in view of the aforementioned competing principles.

If, after such a debate, the political decision by the Obama administration is that the nation's security is so threatened that it is time to set aside our historic principles for not building the active duty military into our domestic security structure, then it can be said that the decision was made voluntarily, intelligently and with full consideration of future consequences. And if the decision is that this is not in the nation's best interest, then the necessary planning can occur now, in advance of a future security emergency, so that an effective response capability, composed of state National Guard soldiers and other non-Title 10 assets, can be trained and equipped to handle our future domestic security needs.

The Posse Comitatus Act's underlying principles protect the people's liberties as much as any soldier on point. They reflect that we are a nation of laws and civilian control, not a military-backed regime where the threat of force preserves the government's power. In the post-9/11 world, the challenge exists to provide an agile response capability to security threats without creating unrestricted executive power. Future homeland security policies should be designed to limit the employment of federal troops in domestic security operations, not to render them the preferred policy choice or to maximize their use. For all of its failings, perhaps the greatest value of the Posse Comitatus Act is its mere existence, a reminder that the United States is not a nation that relies on its standing Army to preserve domestic order. We should be careful not to create a structure that makes access to that asset too easy or frequent, lest it be used too easily and too frequently.

COL Craig Trebilcock *is a civilian attorney and an officer in the U.S. Army Reserve. He is the author of two books,* One Weekend A Month *and* No Time for Ribbons *about soldiers' experiences in Iraq, in addition to several articles on national security issues. He is a 22-year Army veteran who served in Iraq (2003–04) with the 1st Marine Expeditionary Force as well as in peacekeeping efforts in the Balkans (1997).*

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Full Spectrum Mission Training Plans

By LTG James M. Dubik
U.S. Army retired

Mission training plans (MTPs) emerged from the post-Vietnam training methodology. These plans served multiple purposes, but three stand out as useful to today's Army.

First, MTPs helped reorient the Army from an almost exclusively Vietnam counterinsurgency focus to a primary focus on conventional warfighting. From the soldier's and leader's perspectives, the Army commitment in Vietnam looked very similar to current conditions: Soldiers and leaders were either in the war zone, returning from it or soon to be reassigned. Time available dictated that home-station training as well as formal military education focus on fighting under Vietnam conditions. There just didn't seem enough time to do much else. Almost every post and school, for example, had its own Vietnam village, complete with role players. Then came the 1973 Arab-Israeli War, which showed how lethal and complex conventional warfare had become. Senior Army leaders decided that we had to regain proficiency in our conventional skills. The Army of the early 1970s had plenty of combat experience, but not under conditions like those of the 1973 war and not under the conditions envisioned in a potential war in Central Europe.

Second, mission training plans helped rid the Army of multiple training standards. Training in the pre-MTP Army was a mixed bag. Without a common standard, quality depended entirely on local commanders. We had relatively good field manuals, but we had no "how to" guides for training—practical guides that would help us develop and execute the kind of training that changed the concepts in the manual into soldier, leader and unit behavior. When I took over the scout platoon of 3rd Battalion, 325th Infantry (Airborne), in 1972, for example, I traveled up and down Ardennes Street at Fort Bragg, N.C., talking to other scout platoon leaders, hoping to "steal" what I thought were the best ideas. Mission training plans contributed to creating a doctrine-based Army with common Army standards.

Third, MTPs came as part of an overall training methodology. Each plan contained a list of tasks, a set of conditions that trainers had to create so that the tasks could actually be performed and a set of standards used to judge the quality of the performance. Leaders determined which tasks would be the focus of training through a methodology described in the predecessor to FM 7-0 *Training the Force*. Then leaders acquired the resources and set the conditions necessary for performance-oriented training. Leaders also set in place preparatory training when it was necessary as well as an evaluation regimen to determine whether the person or unit being trained met the standard.

By the mid-1980s, the combat training centers (CTCs) had become the crown jewels of the post-Vietnam training revolution. Senior Army leaders ensured that the CTCs reflected the toughest and most realistic conditions possible. In time, conducting honest and objective after action reviews, applying the Army's training methodology to ever more rigorous home-station training and repetitive rotations at the CTCs combined to improve proficiency and professionalism throughout the Army. Eventually, a commonality of performance standards across the entire Army emerged.

This reoriented, retrained and doctrine-based Army fought the first Gulf War. The performance of our soldiers, leaders and units proved the wisdom of the Army's training overhaul. In addition, the Army had become, more or less, a one-spectrum force. This time, however, that spectrum was conventional combat, which defined the Army throughout the 1980s and 1990s. When someone said: "We're warfighters," it meant: "We fight conventional wars." Of course, parts of the force did focus on other-than-strictly-conventional warfighting, but by and large this is how the Army defined itself.

Then the world changed. In rapid sequence came conflicts in Grenada, Somalia, Haiti, Bosnia and Kosovo. The Army slowly realized that war still came in many varieties. Training and Doctrine Command pamphlets, professional periodicals and other publications revealed spirited discussion on war and operations other than war, on the spectrum of war and the Army's place along that spectrum and on various forms of peace operations. The 9/11 attacks and the invasions of Afghanistan and Iraq brough this discussion to a very pointed close The Army had to do more than con ventional warfighting because that' what the nation asked of it and wha conditions demanded.

With nearly a decade of war unde our belt, today we find ourselves wit the best army on the face of the Earth– the most proficient, the most exper enced, the most professional and th most envied. We are also, now, a nev one-spectrum force and far afield fror the doctrine-based MTPs that were th foundation of our proficiency.

The necessities of war—repetitiv rotations to Iraq and Afghanistan– have resulted in an almost exclusiv Iraq/Afghanistan counterinsurgenc training focus. It can't be any oth way—there simply isn't enough tim between rotations, and we don't y have enough units to allow more tim The Army has updated its force-gene ation model, but our mission trainin plans aren't as useful as they on were. Tasks, conditions and standar are outdated. Once again, leaders a using best practices and the latest ta tics, techniques and procedures rath than Army training doctrine to gui training.

Ultimately, the pace of rotations w abate as requirements decrease and t number of available units increas When that happens, however, will t Army be positioned intellectually a doctrinally to reset itself as the f spectrum force it needs and wants





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be? The new FM 7-0 *Training the Force* and FM 3-0 *Operations* manuals are good starts, but they are only starts. The Army needs to update its mission training plans with at least three sets of conditions—general war, hybrid war and stable peace—and three sets of associated standards to every core mission-essential task list (METL) task.

One set of conditions creates a one-spectrum force, whether those conditions apply to conventional combat or counterinsurgency. Using three sets of conditions will impress on our leaders that executing a task to standard depends upon the conditions under which that task is executed. The METL tasks associated with a specific deployment theater will always have one set of conditions, for these tasks are derived from specific wartime requirements. Core METL tasks, however, have a wider focus. These are the core tasks in which a unit must be proficient in all conditions because they are the unit's basic skills. When core METL tasks are used to reset a unit to basic combat tasks, leaders can use the general war conditions and standards. When they are used for sustainment training while in the ready/available stage of the Army force generation model, but not aligned with a specific wartime theater, the leaders can mix conditions and standards as commanders deem necessary.

The Army has done relatively well with updating its intellectual manuals. Mission training plans can now be written to interpret these manuals as practical training guides—tasks, conditions and standards—that include current best practices. In this way, behavior can be aligned with the principles described in Army field manuals consistently across the Army.

Finally, the Army needs to consider developing a new mission training plan that lists the set of tasks, conditions and standards for security-force assistance operations. At least for the foreseeable future, many of our units will continue to help develop Iraqi and Afghan security forces—and perhaps others. Some of these tasks may find their way to a unit's theater-specific tasks, but some may even become core METL for selected units. Security force assistance could end up as an enduring requirement for our Army—both conventional and special operations.

The set of field manuals that provides our leaders with the intellectual foundation of a full spectrum Army by presenting and explaining principles as well as providing context by using both history and current trends is absolutely vital. This set represents only half of the requirement, however. The other half involves translating this intellectual foundation into solid behavior performance. A doctrine-based, full spectrum force needs full spectrum mission training plans. □

***LTG James M. Dubik**, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.*

Strategic Planning: A Virtual Possibility

By Arthur McMahan

Army Management Staff College (AMSC) teaches leadership and management to the Army Civilian Corps and military leaders at two campuses—Fort Belvoir, Va., and Fort Leavenworth, Kan. One of my responsibilities as director of educational services is to manage the strategic planning process, including the annual strategic planning review of the mission, vision, goals and values of the college. When I arrived at the college several years ago, I was given four days for strategic planning. The time allotted for strategic planning this year was one day. How could we possibly develop an effective strategy in one day?

Since launching the civilian education system, the daily tempo for AMSC has increased dramatically, making it almost impossible to schedule meetings and training for all members at once. After spending several days trying to coordinate individual and departmental calendars, I finally bemoaned to myself, "This is virtually impossible!" I didn't know at first how fortuitous a statement I'd made.

I realized, after reading an article on Twitter and watching a television show that incorporated virtual discussion into its format, that a virtual strategic planning meeting might be possible. We began by exploring the virtual resources available to our employees at our two campuses. We needed to convince leadership that this was a good idea and that we could conduct a quality strategic planning meeting using the virtual mode for most of the underlying discussion.

Strategic planning is much more effective if everyone is involved, so it is critical to have a process that is accessible to everyone, in which all feel welcome to give their thoughts and opinions. The virtual process puts participants on an equal footing, regardless of their position in the college, and gives introverted personalities a way to engage that may be more comfortable for them. Participants can comment on any topic whenever they want, with one caveat: Their names are printed with their comments. With the approval of college leadership, principally the commandant, Col. Garland Williams, we continued planning the event.

Fortunately, the college had just launched a "community of practice" (or virtual learning community) that utilizes SharePoint software. This configuration allowed virtual collaboration and discussion for faculty, staff and students. After a meeting with the contractor for the project, I concluded that we could use this existing platform to conduct a review and discussion of our current mission, vision, goals and values preceding our one-day face-to-face meeting. AMSC has 121 employees (on two campuses),

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each of whom has access to the Internet, which allowed us to design a virtual discussion site and permitted everyone to contribute from individual workstations.

After obtaining approval from the organization's leadership, we had to convince the rest of the workforce that this plan would work well for them. Because of the age range in our workforce, some employees (mainly Generation X-ers and Millennials) quickly engaged in the process because they were quite comfortable with technology, while others (Boomers and Traditionals) who were not as familiar waited to engage until after they witnessed the successful interaction at the site.

The promotional campaign included weekly reminders to the leadership team about the process that expressed expectations that everyone get involved and an e-mail from the commandant inviting everyone to join the discussion, assuring them that their comments were valuable to the organization's success. We also used a word-of-mouth campaign, by which my team members and others talked with employees about the merits of participation in this important process. In each of our discussions, we emphasized that time should not be a factor because participants could enter the site at their convenience and post their comments in a matter of minutes.

We divided the site into four topic areas: mission, vision, goals and values (MVGV). We also added knowledge management and marketing, two critical elements that affect and are affected by strategy. We assigned topic leaders who would monitor the discussion, answer questions that would presumably arise and keep the conversation moving productively. Topic leaders were selected based on their knowledge of and ability to conduct an analysis of their specific topic areas. We conducted the strategic planning process in four phases throughout 30 calendar days.

Phase 1 allowed participants to submit questions or comments about the 2008 MVGV or to address the three questions posted to initiate conversation. The last question—common to all of the topics—was: What other comments would you like to make about (the topic area)?

Phase 2 consisted of a synopsis of the Phase 1 discussion of each topic written by the respective topic leader. The synopsis was loaded onto the learning community web site for participants to review and make additional comments on before Phase 3.

Phase 3 was the one-day face-to-face meeting. The site remained open so that employees not in attendance could participate in or monitor the discussion. Everyone at the Fort Belvoir campus was invited to attend, and the Fort Leavenworth leadership sent representation from their campus. The 56 participants in this phase were divided into groups of five or six people. The analyses from the first two phases were provided to each group, who then discussed the differences and determined what they thought the final outcome should be. We brought the groups together for consensus, allowing each group to elaborate on its most critical points. We conducted this process for each topic section, which was led by its respective topic leader.

Phase 4, the final phase, occurred back on the learning community web site. The topic leaders analyzed all the information from the previous three phases and developed a final output document. That document was posted for seven days to allow all participants one last chance to submit their opinions. The final product was then sent to the commandant and approved as the 2009 AMSC Strategic Plan.

All phases of the strategic planning session were very successful. Participants visited the discussion site to make their comments, ask questions and interact with each other about the various topics. There were more than 400 visits to the discussion site over the 30-day period, with 106 distinct visitors of the 121 employees at both campuses. Peak hits in phases 1, 2 and 4 occurred when participants were active in the site, and fewer hits occurred during the topic lead analysis and the face-to-face periods.

Using the virtual phases combined with the one-day face-to-face session allowed maximum participation while saving time. Participants could spend several minutes each day engaging in creative sharing right from their workstations. The attendance at the one-day session actually increased from previous years, when workers had to spend several days debating the details leading up to a consensus or when higher priority projects kept them away from the activities. The energy and enthusiasm at the face-to-face session was high among all participants. The final consensus took less time because most of the background work was completed during the virtual sessions. We were also able to include more people from our remote Fort Leavenworth campus without spending excessive temporary duty funds.

This method of conducting strategic planning is applicable to large or small organizations, particularly those that are geographically dispersed. Virtual planning combined with a shortened face-to-face session could result in maximum participation while minimizing costs in terms of time and travel expenses. Schedule conflicts are easily eliminated as individuals can participate from their workstations. In addition, those who are less prone to speaking in a group setting can feel comfortable that their contributions will be considered during the virtual discussion. The virtual strategic planning session coupled with a one-day workshop was productive for the Army Management Staff College and has great potential for other organizations. □

***Arthur McMahan**, Ph.D., is director of education services and strategic planning at Army Management Staff College, Fort Belvoir, Va. His responsibilities include strategic planning, institutional research, quality assurance, performance management and the balanced scorecard. He is a Malcolm Baldrige National Quality Award Examiner (2007), has served on the U.S. Army Training and Doctrine Command accreditation team and is a past member of the Board of Directors Washington Area Corporate University Consortium.*

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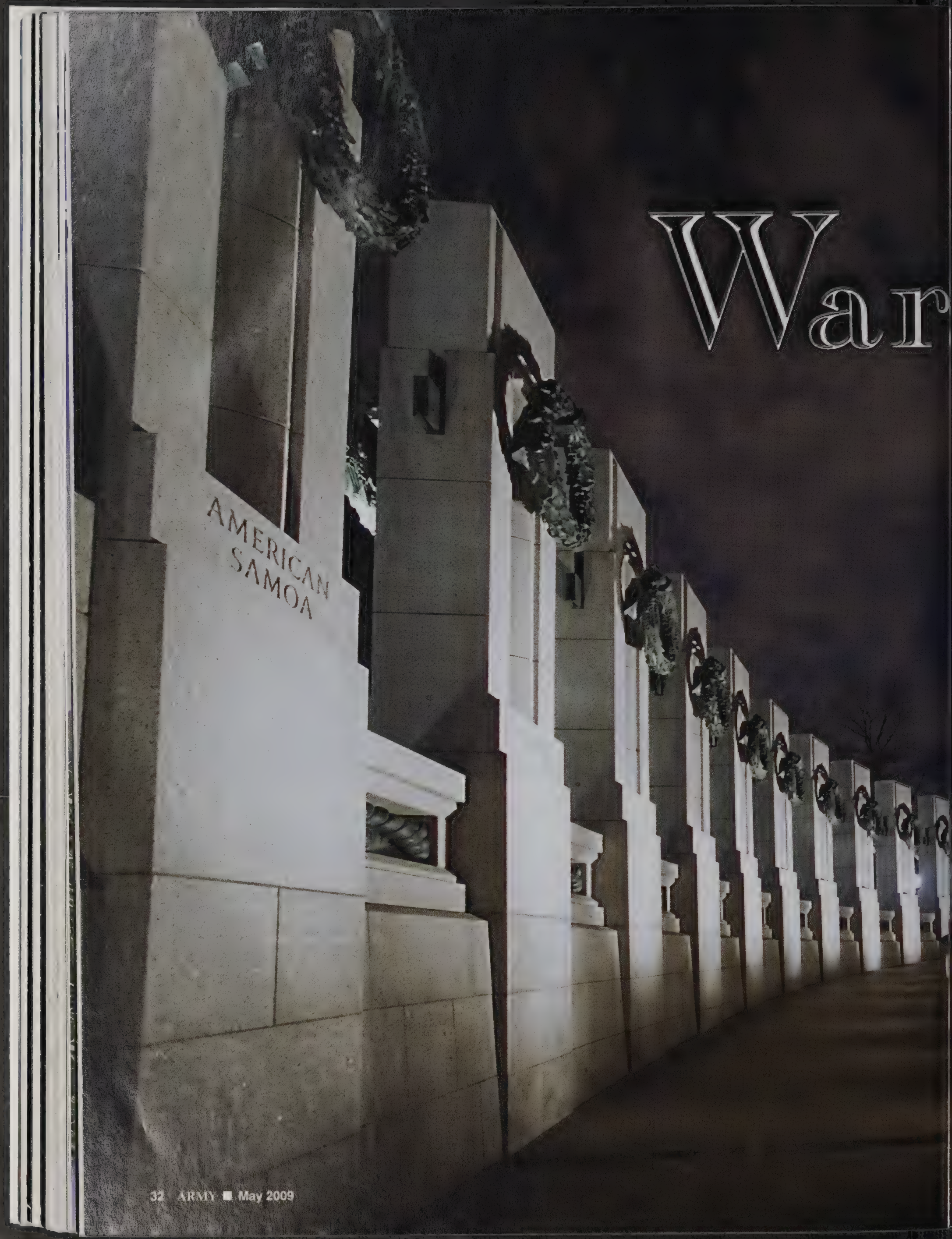


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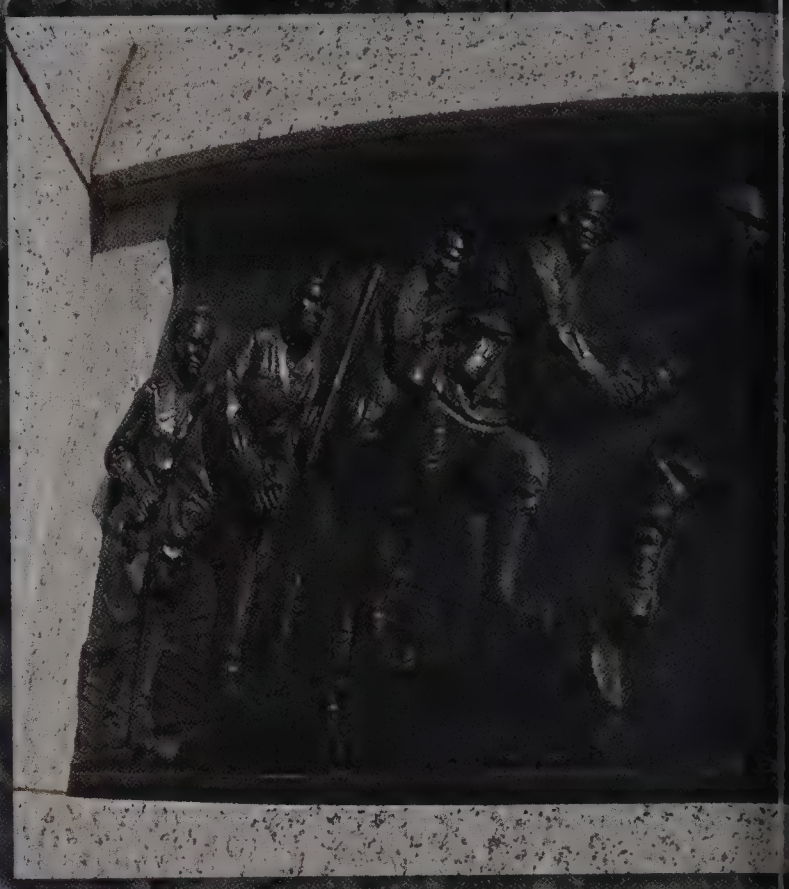

War
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Memorials

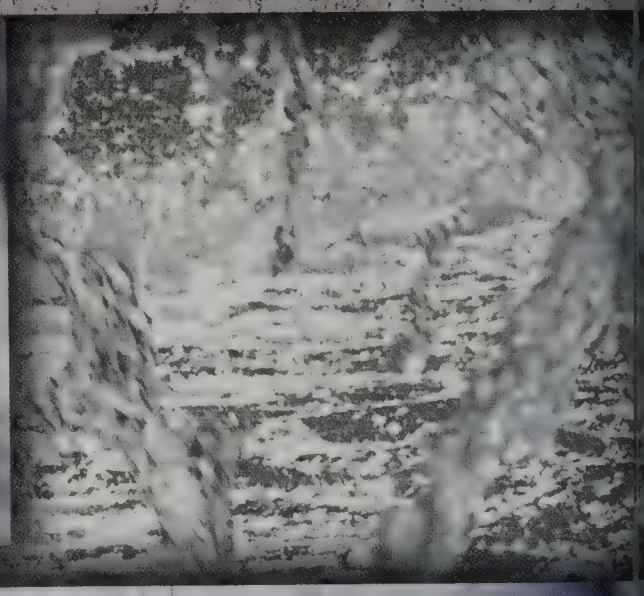
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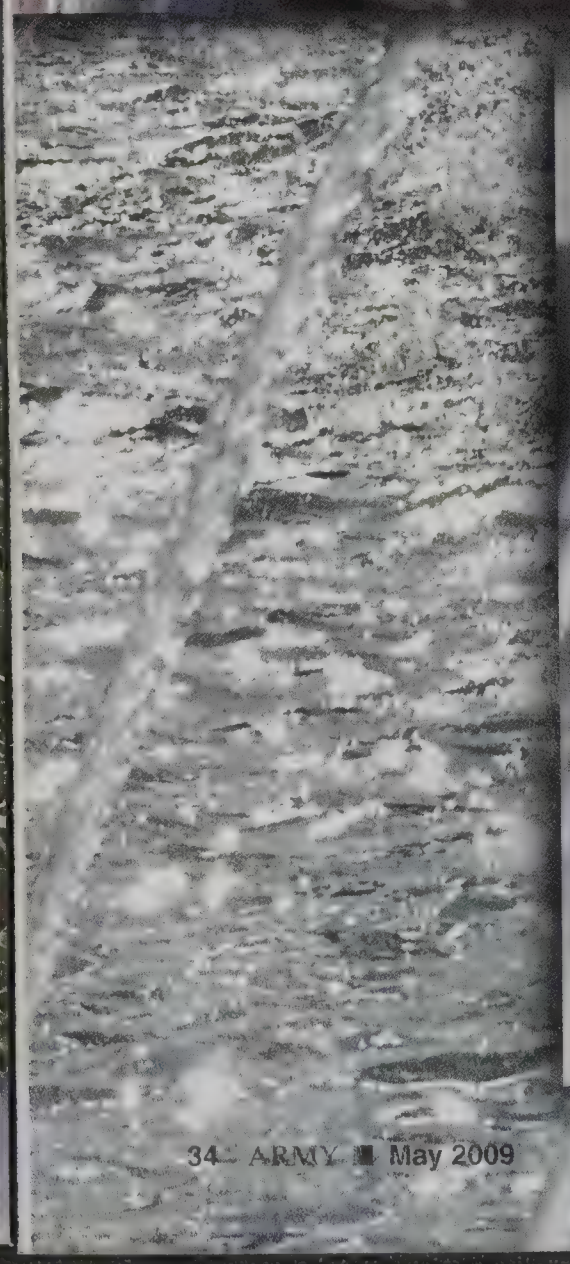
Military memorials throughout the District of Columbia honor those who died protecting and defending the United States. These photographs of some of the better known monuments to the veterans of World Wars I and II, the Korean War and the Vietnam War salute the dedication and sacrifice of the heroes this nation remembers and celebrates each year on the last Monday in May.

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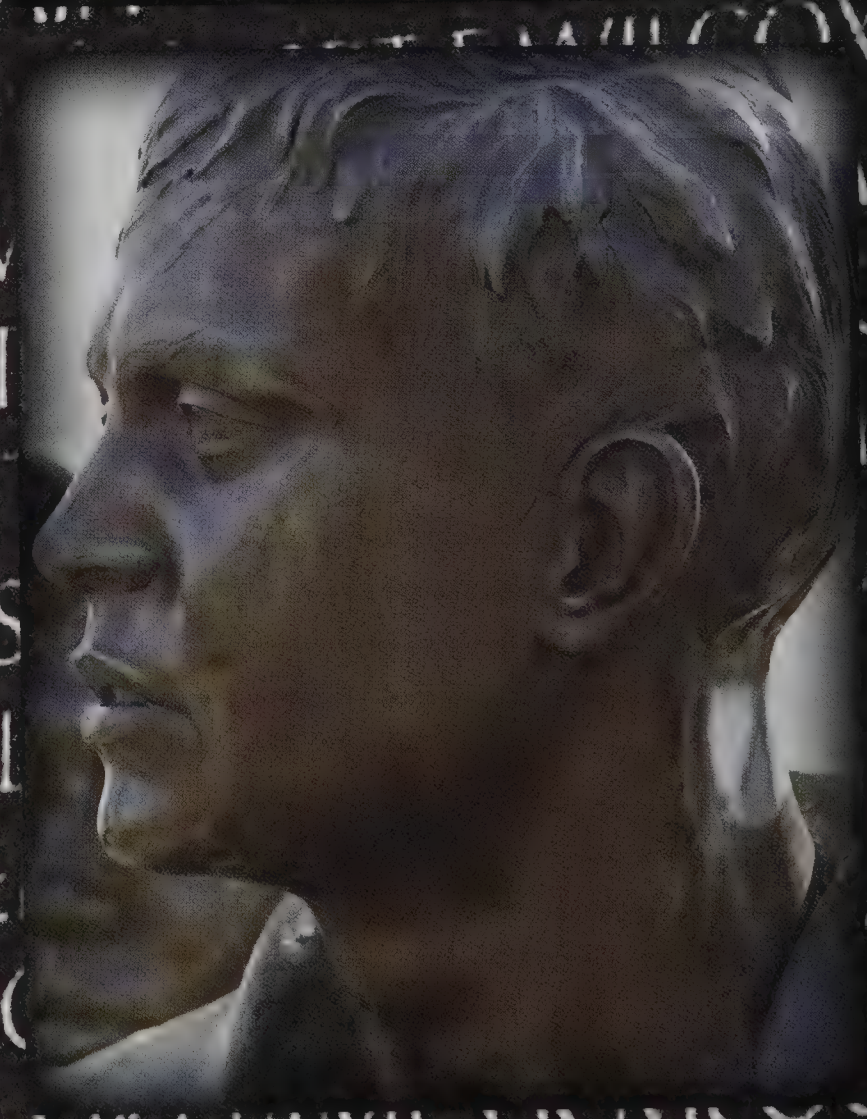
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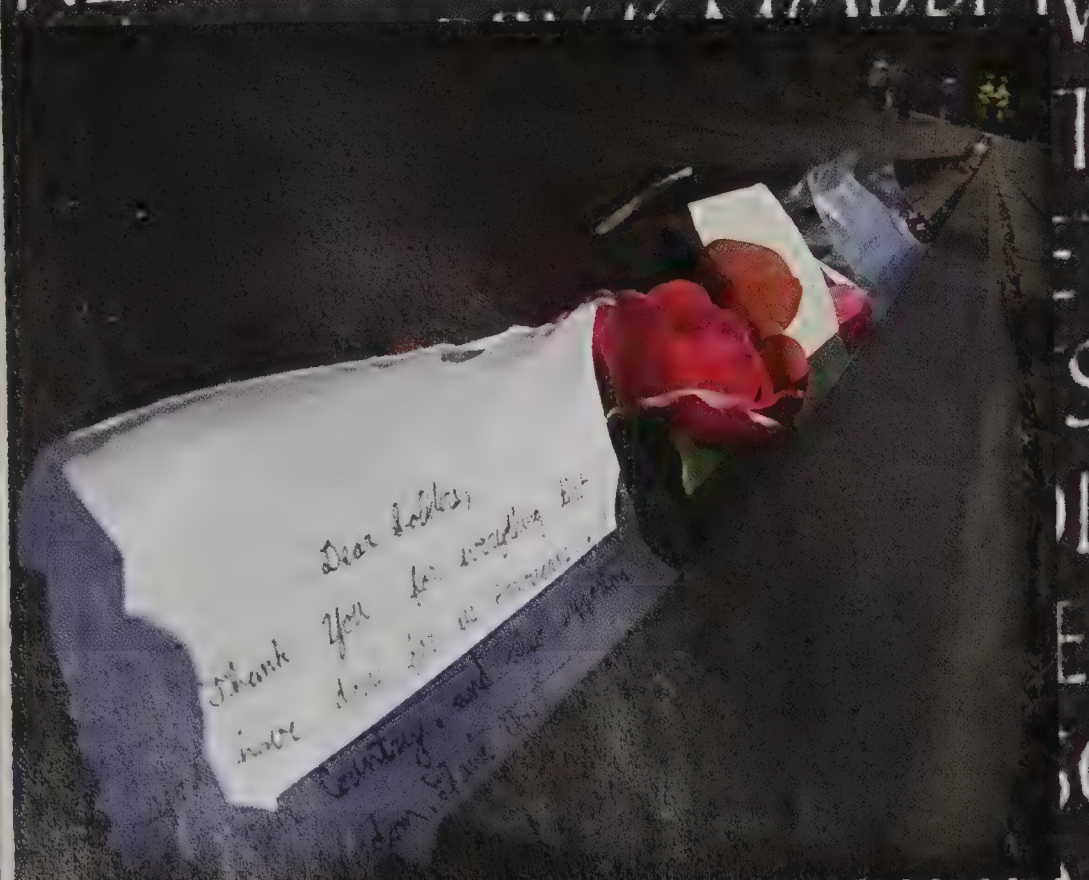
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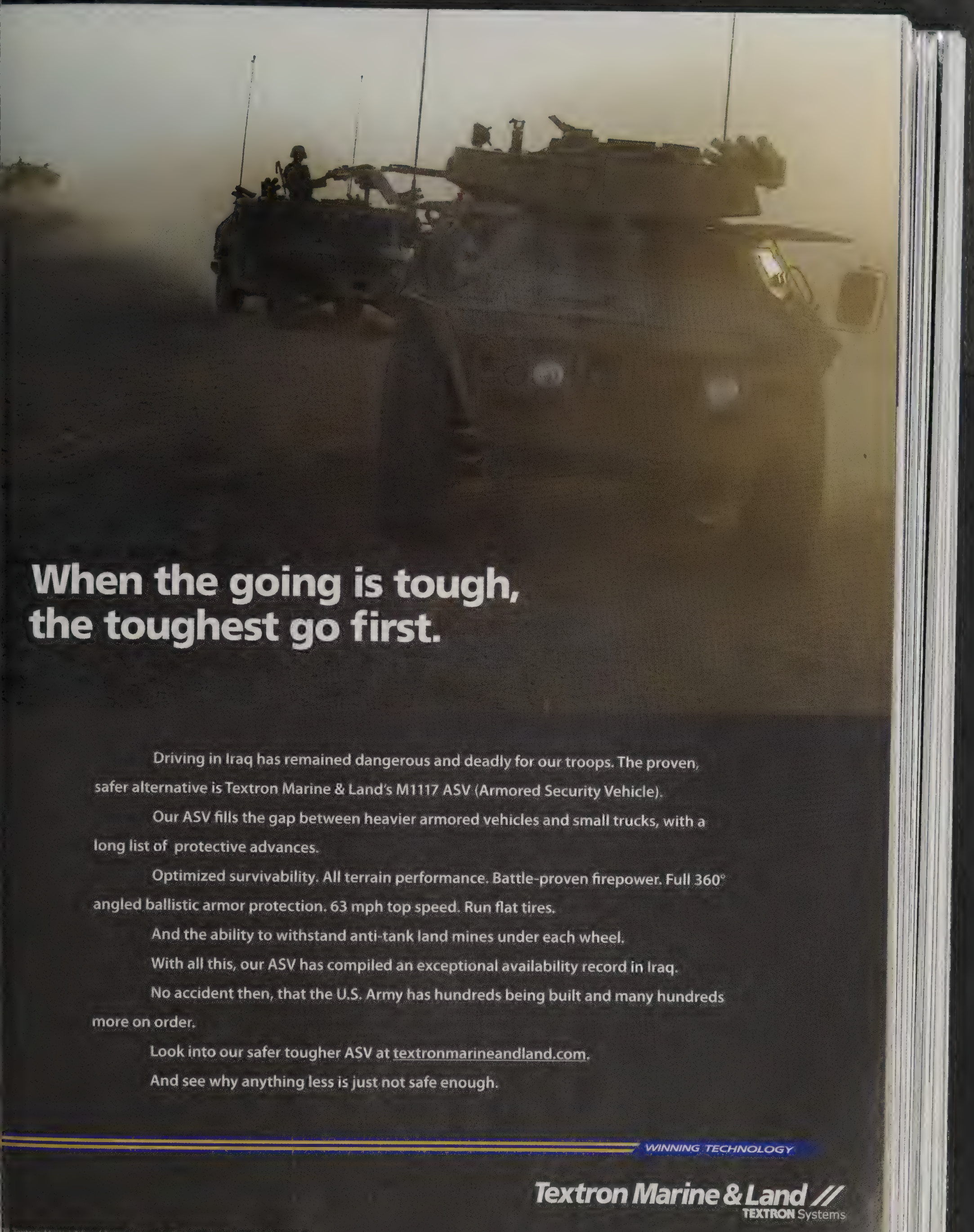
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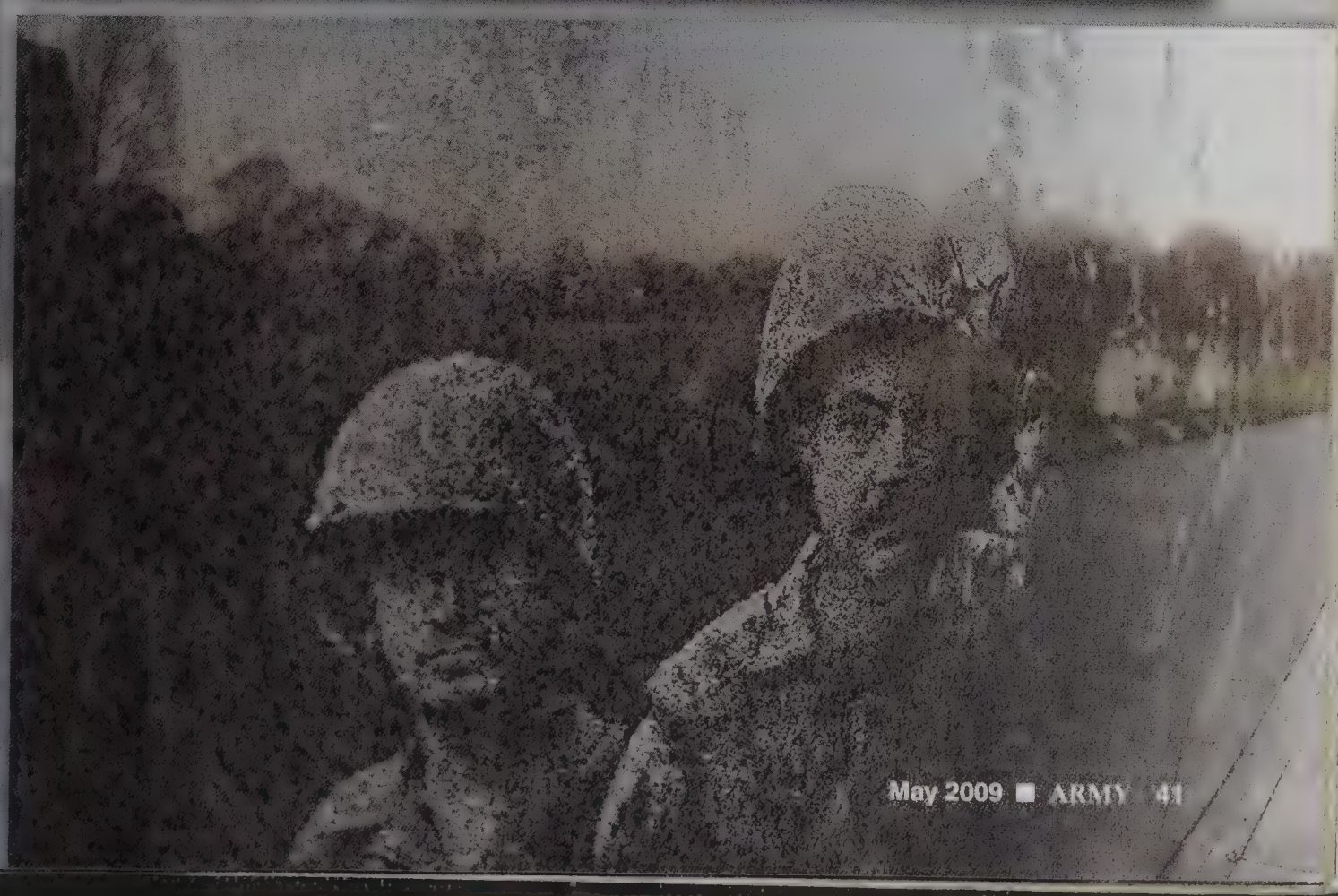
Korean War Veterans Memorial

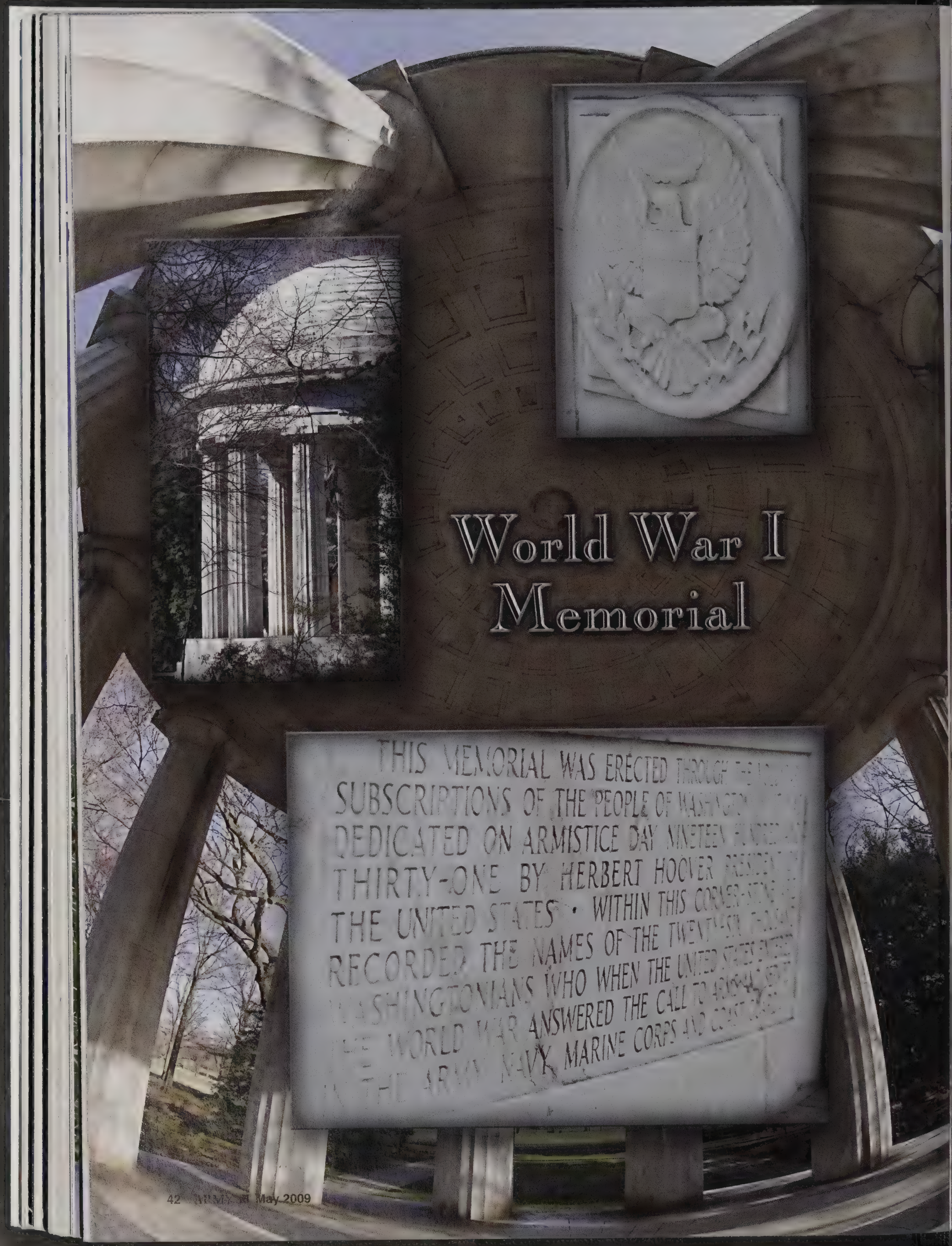
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World War I
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Pulling
An Infantry Platoon
On a Year in



Teeth: Leader's Perspective Afghanistan



By 1LT Kevin Bell
Photographs by Paul Avallone

We were returning down the same riverbed we had driven up early that morning—the same huge rocks, the same water-eaten makeshift trail. Although I hated it and hoped I wouldn't regret it, as platoon leader I didn't have a choice, since there was only one route leading to the far-off tribe that had been our destination that day. My platoon rode in four uparmored Humvees, 18 soldiers total with a battered Afghan Humvee of five soldiers attached to us. We were still about 3 miles from our base, Combat Outpost (COP) Wilderness, over the rough mountain terrain, about a half hour away. In a mile we would turn north to drive uphill and out of the valley to the road that would take us home.

In pursuit of insurgents who fired on his mounted patrol, then-2LT Kevin Bell directs his platoon and Afghan National Police against an enemy with intimate knowledge of the terrain and the ability to disperse rapidly among a fearful population.



In the minutes following the ambush, with the insurgents having dispersed, LT Bell radios his NCOs to coordinate area security. The blood on LT Bell's sleeve is from Charlie Troop's first fatality of the year-long deployment, PFC Ara Deysie.



A Humvee's gun turret window, spiderwebbed by armor-piercing rounds, is evidence that, absent more powerful improvised explosive devices, the enemy's ambushes frequently depend on lucky shots.

The day started with a promise of welcome sunshine, but as the afternoon wore on, the sky became darker and the countryside smelled of rain. We were passing a large village built up on the mountainsides—really not more than a scattering of mud houses at a bottleneck where two valleys tied themselves into a tight knot of rockfalls and low white water. I was thinking of the day's frustrations and how I might improve on them in the future when I heard two loud explosions straight ahead. It took me a moment to change gears mentally, and by then the ambush had kicked open like a hornet's nest, with my platoon in the middle.

Within seconds, what we would count as 12 rocket-propelled grenades (RPGs) had exploded on or around our vehicles, and we needed to get out of the kill zone fast. The air outside was filling with dust, making it hard to see. As I radioed my front truck—"Keep going, drive faster!"—two RPGs struck our Humvee, and I watched through smoke-stung eyes as the .50-caliber machine gun from my turret bounced as if in slow motion down the hood and onto the road in front of us. At the same time, I felt the body of my gunner collapse into the truck between me and the driver.

We consolidated the platoon out of contact a few hundred meters down the riverbed and realized that in the "fog of war" we were missing one Humvee—and with it, one of our squads. Unable to communicate clearly with them, we realized they were still in contact with the enemy. We immediately turned around and headed back up the riverbed and into the kill zone a second time. There we found that by some fluke the separated squad had turned off the road and up into the heart of the ambush position. On that hilltop, despite being outnumbered at least three to one and fighting out of an overturned and inoperable Humvee, the squad of five men had driven off the enemy with pure determination and firepower.

We had lost one man, my gunner, PFC Ara Deysie. He was Native American, a member of the Colorado River Indian Tribes from Arizona, had turned 18 just prior to deployment and was the youngest soldier in the entire squadron. We all found our only consolation in the words of his mother, so proud of her son, who reassured us that even as a boy of 5, Deysie wanted nothing more than to be a soldier. His calling in life was to serve in the Army and fight for his country in war. These were heroic dreams, and he met them bravely.

***1LT Kevin Bell**, a graduate of Davidson College, entered the Army through OCS. He was assigned to Troop C, 1st Squadron, 61st Cavalry Regiment, 4th Brigade Combat Team, 101st Airborne Division (Air Assault), just before the brigade's deployment to Afghanistan in March 2008. He served the entire year there as Third Platoon leader and has recently returned to Fort Campbell, Ky.*



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The scarred Humvee turret tells the story of the two rocket-propelled grenade rounds that hit, exploding through the front, killing PFC Deysie in the May ambush.





In the immediate aftermath of the ambush, LT James Marione and the quick reaction force from Combat Outpost (COP) Wilderness rush to the ambush site to question the Afghan on whose land the attack was staged.

In the week immediately following the May 2008 ambush, I pored over the events of that day in a continual loop through my brain, attempting to figure out what I'd done right and what went wrong. The purpose of the patrol was to investigate a reported double murder. At a weekly *shura* (council) with leaders from the various area tribes, an elder had mentioned that two boys were killed by foreign fighters for "helping Coalition forces." The trouble was that he hadn't told us anything else; the only specific information that might help us track down the killers was the name of the tribal area where the killings had occurred.

When my troop—Charlie Troop, 1st Squadron, 61st Cavalry, 4th Brigade Combat Team, 101st Airborne Division (Air Assault)—deployed to Afghanistan in March 2008, we took command of COP Wilderness in Paktya Province. At that time, there was no information about tribal locations and boundaries in the area, and it was one of my early priorities to fill in these gaps. Even so, we had only a vague guess about where to begin our search that particular day in May, knowing little more than a wispy story and a tribe's name. We headed up that riverbed and farther into the valley to stop in far-flung places we'd not been to before. As we got higher into the mountains, we became increasingly aware of the villagers' fear of speaking with us. Two were so scared that they shook visibly, like the wind-buffeted leaves of the apricot trees above. Some of them would say nothing, others merely confirmed that the murders had occurred. Finally we found someone who could tell us the name of the unfortunate father and directed us to where he lived.

I'm not sure what I was expecting, but the nature of our encounter with the man took me completely by surprise. That brief exchange opened my eyes to the challenges we would face in trying to make real progress in our neighborhood of Afghanistan. When I met him halfway up the hillside, he stood stooped and sad in a light blue shawl, with his nephews and cousins around him. He admitted that his sons were killed, but when I offered to help him find the killers, he dismissed the idea out of hand without even looking at me. Flummoxed, I tried a different tack and spoke more obliquely about how we might help with security problems in the area. He was polite, but he responded with quick, short answers that would lead me nowhere. Finally, his eldest nephew broke in and told me that he was glad that we'd come to visit his grieving uncle, and he appreciated our concern for his dead cousins, but our pres-

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LT Marione and his platoon NCOs field requests from villagers asking for extensive funding for local projects.



Just a few weeks into his deployment to Afghanistan, LT Bell conducts a mission brief to his platoon prior to the day's patrol from COP Wilderness.

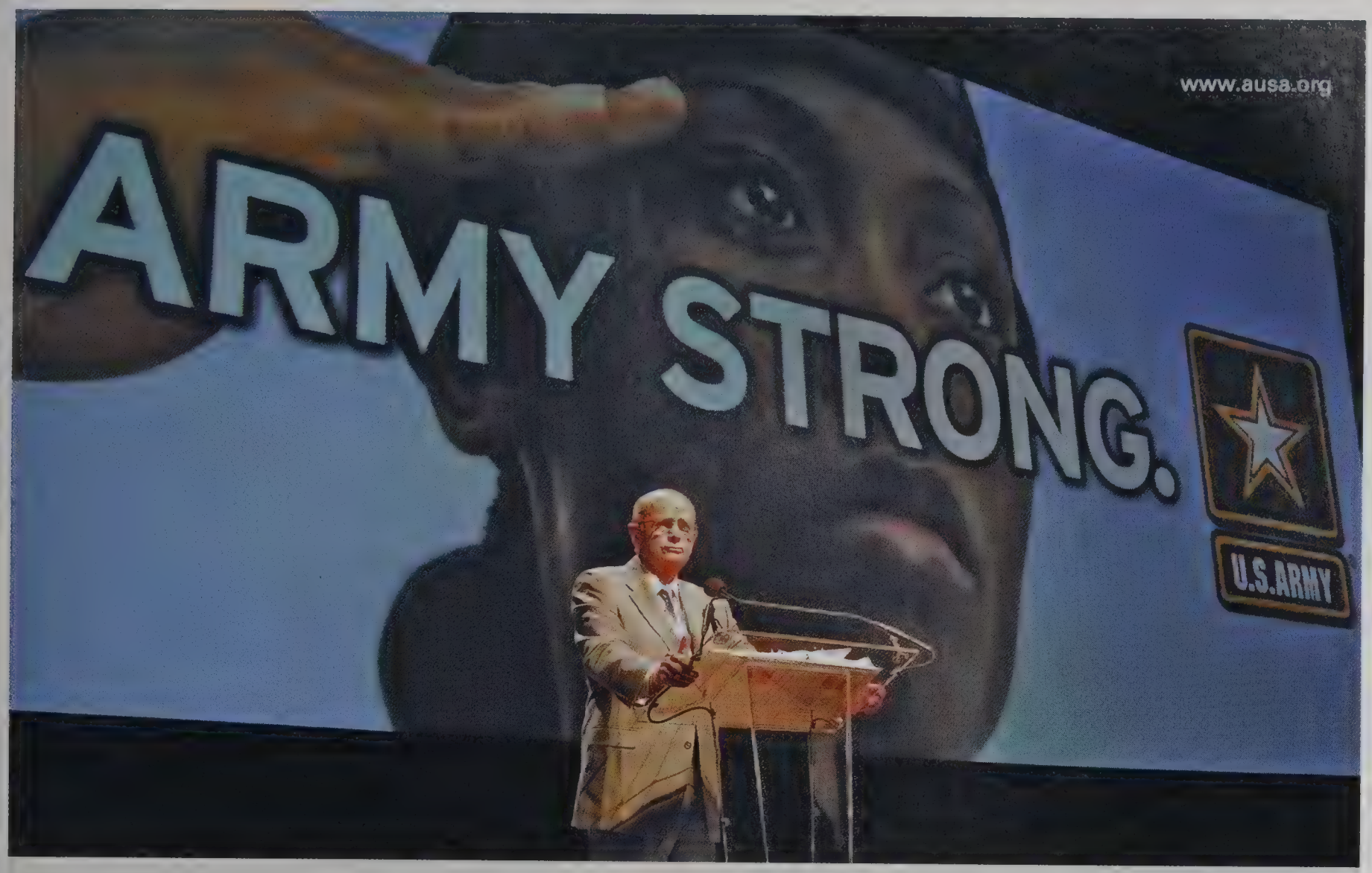
ence in the village was putting the family in danger. They wanted us to leave. It didn't matter how many of the enemy my platoon had killed before, or how many caches we'd found and destroyed last week. These people didn't feel safe, and they weren't going to tell me anything that might put them at risk. Our fight to get the locals to let us help them was like pulling teeth.

The father of the dead boys didn't want to talk to us, even though we were the first and only ones to come out and try to assist him. Worse yet, while any one of the people living within easy sight of the ambush position could have walked up the riverbed to meet my patrol and quietly warned us of the waiting ambush, none did. I reasoned that perhaps my mistake had been in straying from doctrinally accepted counterinsurgency (COIN) practices. Maybe I hadn't properly absorbed the information in *No End to War: Terrorism in the Twenty-First Century* by Walter Laqueur or *How Democracies Lose Small Wars* by Gil Merom—two volumes I read prior to deployment.

Did I need to reread the Army's COIN field manual? Could it be that I had insulted someone at a *shura* or failed to make the right kind of effort to get to know local leaders? I knew there was something I was missing, but I couldn't identify it.

It didn't matter in the short term, since the pace of my troop's operations out of COP Wilderness escalated furiously with the warmth of the summer, and in the end these theoretical musings never had much impact on the day-to-day mission. Keeping track of our plan for the next day became the normal extent of my intellectual exertion. COP Wilderness is the linchpin in the security plan for the Khost-Gardez (K-G) Pass, a dirt road linking the capitals of the southeastern provinces of Khost and Paktya. NATO had committed to paving the road into a two-lane highway, and our troop's mission was to secure the most dangerous section between the foothills and the top of the pass.

By summertime, we no longer went out on missions with the primary objective to become acquainted with the local leaders or to build relationships with the tribes. I had already used the early months to get to know every tribal leader by name, and I had spent countless hours talking with them in their homes over tea. I knew where their schools, mosques and *madrasas* (religious schools) were, and how many people attended each. As an afterthought, in late May I drew up a tribal map depicting the boundaries between all of the local subtribes of the area and where their leaders lived. This was new work for our troop's area of operations in the K-G Pass, but it was little more than a nice wall hanging at this stage of our counterinsurgency effort. We were working in an area that had been a tombstone of the Soviet advance into the Pashtun south, to which the rusted hulks of artillery guns and amphibious troop carriers mutely testified.



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In years past, these mountains were Jalaluddin Haqqani's stomping ground. He was the most influential and hunted terrorist leader in this part of Afghanistan during the Soviet-Afghan War, and today his network of fighters is the abscessed tooth that the stubborn locals won't help us yank. His henchmen made a primary goal of shutting down commerce and traffic through the K-G Pass. We spent the better part of the spring, summer and fall months chasing down his men, destroying their caches of weapons and building a new base (named in honor of PFC Deysie) to prevent them from accessing major ambush positions over the road. We kept the road safe enough that the flow of goods and services through the pass never ceased. In the midst of all of these security missions, I intuitively understood that all of the glad-handing and networking I'd done earlier in the year wasn't exactly useless. It just wasn't going to produce the kind of useful information and results I'd hoped for.

As the fighting season drew to a close with the end of Ramadan and the coming of winter to the mountains, I spent my free time thinking back over the successes and failures of the last year. We had found and destroyed caches of all sizes and descriptions. My soldiers had killed many enemy fighters and defended the local district centers from attack, and our troop's leadership had worked to undermine the influence of Haqqani's network at every available opportunity. We were always frustrated, however, by the knowledge that the only thing standing between us and the destruction of every foreign fighter in the surrounding mountains was the intransigence of the local villagers. The people knew where these men were hiding; most of the caches and camps we found were within sight of large towns. They just didn't want to tell us.

By late summer, we had long accepted as fact the idea that *shuras* would never produce substantive results. It was a running joke among the troop leadership, with the question "How'd the *shura* go?" answered by an exaggerated, sarcastic "Oh, it was great, we got a lot done." That's not to say that we didn't take our mission seriously, or that we stopped speaking with locals. Our presence made an impact even when we didn't get the results that we desired; our hope was that our actions would someday convince the people that we Americans were there for good, for the duration, for their security. Despite our frustrations, we had to fight the good fight.

It's a common belief among foreigners that Pashtuns are difficult to deal with. Many times the outgoing soldiers and other would-be advisers told me that talking with Pashtuns is an exercise in futility. To be frank, there is a great deal of truth to that, but it doesn't tell the whole story. I found that no matter how hard it was to get real cooperation out of the Afghan people, many of the villagers we visited greeted us eagerly when we arrived. Even in the rare event that we could immediately sense the dislike or even loathing in people's eyes, the men who met us were required by the cultural norms prescribed in Pashtun *Wali* to be cordial with us as visitors. Usually, the only indicator we could use to identify our host's genuine feelings about us was the point in the conversation when he offered us tea. If the offer came early enough, then it was a good sign. Too late, and they already expected us to leave and were only being polite. But in every case these people were courteous to a fault, and would often share all kinds of local lore and gossip with us; just not the kind that would lead us to the enemy, not even a hint. They were especially eager to talk about what humanitarian aid or projects we could offer them: the paved road, new schools, clinics, wells or sometimes solar electricity. Unfortunately, the poor security situation of the K-G Pass was a major hurdle for many projects that would otherwise have been perfectly viable.



LT Marione, the platoon leader of LT Bell's Charlie Troop sister platoon, which is colocated at COP Wilderness, meets with villagers during a patrol in the Khost-Gardez Pass, a dirt road that links the capitals of the southeastern provinces of Khost and Paktya.

Undeterred, we took what humanitarian aid we had out to different villages dozens of times. Of course, while the people generally became friendlier when we dropped things off, it only made them expect more free stuff when we arrived again. After we finished talking with them about what the Coalition could do for them, we would always ask, "And is there anything you can help us with? We know there are men in the mountains south of here that use the ambush positions just east of here. Can you tell us where they go at night, how many of them there are, or when they come and go?"

At this point in the conversation, it didn't matter if we were speaking with a shepherd from the mountains whom we'd never seen before or one of the many locals whom we knew by name

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During a weekly shura *(council), Charlie Troop and COP Wilderness commander CPT Thomas Kilbride (center) listen to the local civilian leadership.*

and had visited dozens of times—the answer was always the same: "I don't know anything." Pressing further, one could extract an infinite series of excuses that went, in order, from "I don't know anything" to "I'm afraid to tell you" to "I don't have weapons to defend against them when they come" to "It's not our fault, we're your friends; everything is Pakistan's fault" and so on, ad nauseam.

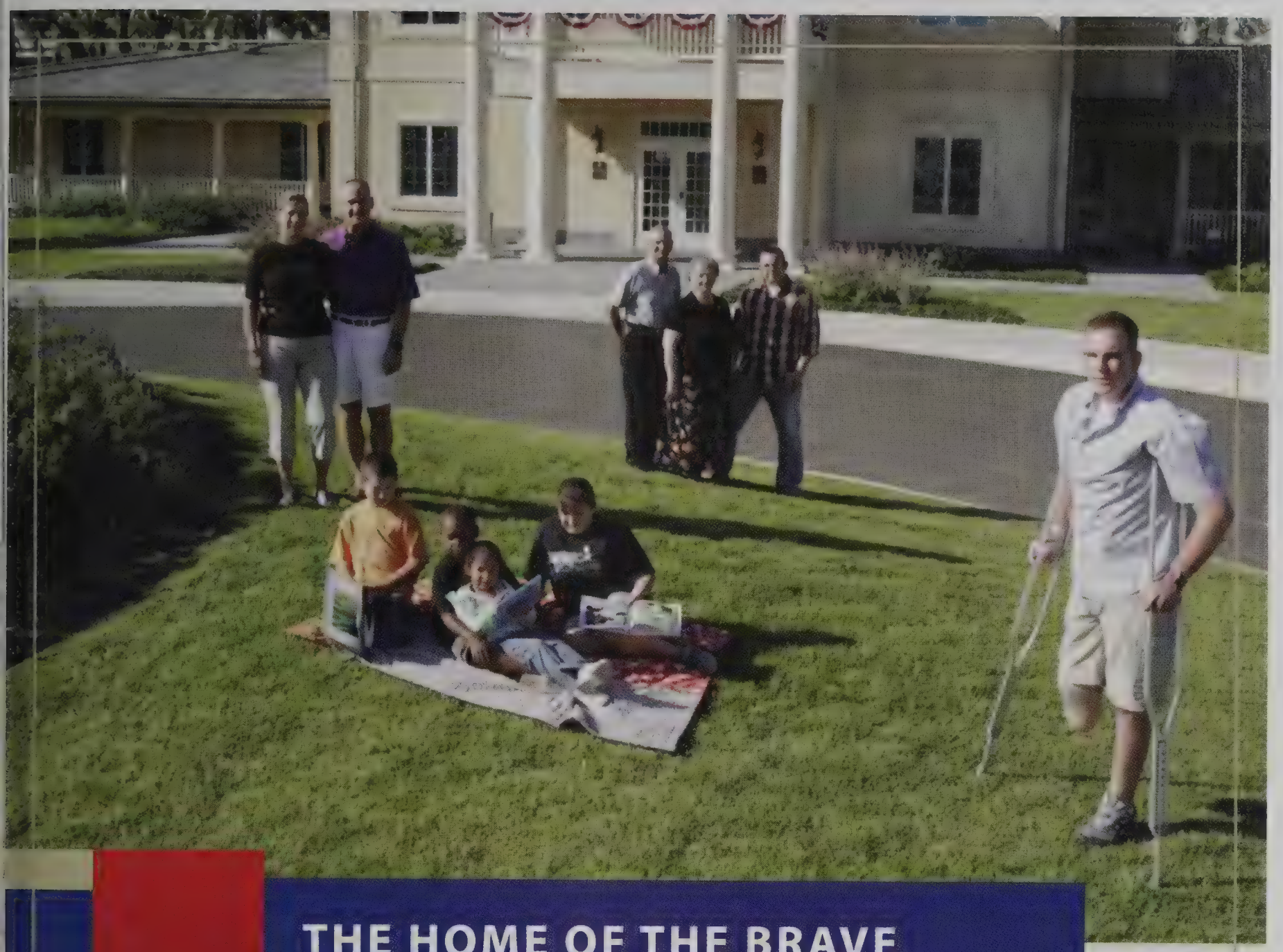
The Afghans consistently lied to us, and we knew that they knew that we knew it. Yet their lying was far less malicious than it was simply pragmatic. The Afghans of the area are a practical people in survival mode. They didn't believe that it was in their best interest to help us. Not yet. The most successful local leaders are infamous for taking what they can get from the Americans and then, reportedly, turning around and making overtures to the Haqqani network's leadership for whatever they can extract from them. The ambitious ones play both sides, while the average villager has little or no concern about who runs the countryside—all he or she wants is to be left totally alone.

This local indifference is met by a thinly stretched Ministry of Defense. Besides the limited Afghan National Army (ANA) and Afghan National Police (ANP), there is no effective instrument of the government in the K-G Pass. Despite the occasionally impressive efforts of the ANA and ANP, the locals know that much of their strength comes from the Americans supporting and fighting with them; in the K-G Pass, that meant Charlie Troop. With the single exception of the Ministry of Defense, the other federal government ministries might as well not exist to the shepherds and farmers who live in the pass. Tribalism is alive and well in these mountains and makes it very difficult to improve the problems in governance. Locals see the government as a far-off and nebulous source of various resources. Time after time, government representatives whom we escorted to *shuras* tried to attach security-based conditions to Coalition projects or work, and the Afghan elders would enthusiastically endorse these initiatives in public. Never once, however, did I see any of the tribal leaders follow through on their promises to participate.

In short, it was nearly impossible to get the locals to lift a finger in their own interest. That was why the father of the two murdered boys had told me nothing, even though he surely knew the number and names of the killers, even where they had gone to sleep that night. That was why the *shura* members with whom I met on a weekly basis were perfectly willing to invite me up into their homes and would talk for hours over green tea. But the moment that I would press them for serious help, they would refuse to put themselves in the dangerous position of informant/snitch. They could see the good work that we were doing in the K-G Pass as we fought to keep it clear of the Taliban enemy, and they expressed appreciation for our idealism and good manners, but they also saw no real incentive to help—only danger to themselves, their families and their tribes.

There may be no quantifiable threshold at which the attitude of the locals will change, but there will come a tipping point in the war when local schools are no longer being shot up and torched, their teachers are no longer being threatened, and the people who come to give information to Coalition patrols can sleep safely in their homes. On that day, the close relationships that we American soldiers have been building with local leaders will be vital. With real local participation, projects will be easier to fund and much easier to build safely. By then, the K-G Pass will have been paved and commerce will start making a major positive impact on the quality of life for these people. Of course, a greater government presence would also go a long way towards helping the various tribes of the area to enter their own community as Afghans.

I'm not an idealist who believes that there will be no more fighting; those illusions were shattered long ago. But once we cement our hold on the area's security, operations in COP Wilderness will significantly change. This year, getting cooperation from people was a terrific struggle; I'd expect less complaint from a mouth unnumbed by novocaine as the dentist's pliers made a final approach. Coalition soldiers are going to have to shoulder the heavy price of blood, sweat and tears that must be paid to make the area secure. The hardest fight we face in the struggle over the K-G Pass is getting the local people to genuinely commit to their country's success. When we conquer the uncertainty and indifference of these tribes, the enemy will have nowhere else to hide. Then the fight won't be so much like pulling teeth. ★



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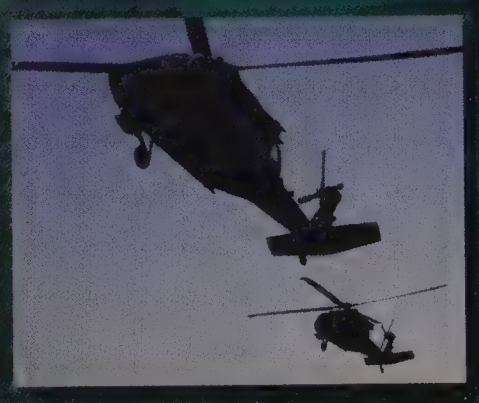
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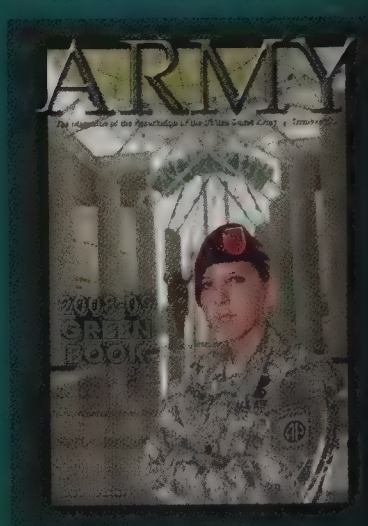
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Wounded Warriors Find Jobs With Army Corps of Engineers

By Carol J. Labashosky

CPT Kevin Morrison reports to work each day along with hundreds of other employees in the Romano Mazzoli Federal Building in Louisville, Ky., where he serves as the new U.S. Army Corps of Engineers (USACE) Great Lakes and Ohio River Division deployment coordination administrator. Unlike most of the others, however, CPT Morrison is a member of the Wounded Warriors in Transition (WWT) program at Fort Knox, Ky., established in January 2008 to offer wounded soldiers recovery, rehabilitation, vocational training and career counseling.

While overseas with the USACE Gulf Region Division in Iraq in 2008, he experienced a life-threatening heart aneurism that required immediate surgery. He was medevaced to the Landstuhl Regional Medical Center in Germany and then transported to University Hospital Hamburg-Eppendorf's University Heart Center, where a world-renowned heart surgeon successfully repaired his aorta. Once stabilized, CPT Morrison returned to the United States and spent more than 100 days on convalescent leave before he was barely well enough to resume work.

"I was unable to move," CPT Morrison said. "I wanted to get back to doing something meaningful." He turned to the WWT program, which matched him up with the USACE Louisville District and his current assignment. Once his discharge is complete, he will be a formal employee of USACE, and he will continue to use his Army personnel skills and experiences to assist other wounded warriors in finding work that suits them and their abilities.

The Warrior Transition Unit (WTU) at Fort Knox is composed of nearly 300 wounded warriors in transition (WWTs)—soldiers who have sustained an injury but are rebounding while they wait for a determination of their medical or Army status. They may or may not be fit to return to their units, but they are fit for the business of work. According to WTU battalion commander LTC Gary Travis, these men and women are forced to reckon with the fundamental question: "What am I going to do with my life?" For soldiers who have served their country and sacrificed health to some degree, it's a plaguing question. The unit they once belonged to is a world away. Their lives now are different.

COL Travis points out that *wounded warrior* is somewhat of a misnomer because the injuries of the troops in his unit—composed of one-third National Guard soldiers, one-third active duty



Katie Brewer

CPT Kevin Morrison, a wounded warrior in transition, found work with the help of Jean Hull, a human resources specialist at the Louisville (Ky.) District Civilian Personnel Advisory Center.



Katie Brewer

LTC Gary Travis is battalion commander of the Warrior Transition Unit at Fort Knox, Ky., which is composed of nearly 300 wounded warriors in transition, one-third active duty, one-third National Guard and one-third Army Reserve soldiers.

soldiers and one-third Army Reserve soldiers—may or may not have been sustained in combat in Iraq, Afghanistan or other theaters. Although COL Travis says he'd like to keep every soldier in uniform, the reality is that the Army will have to let some of them go. In the meantime, however, they are in a position to work, and work hard—and many employers welcome their help.

The U.S. Army Corps of Engineers Louisville District is one such organization. "This district understands sacrifices that are made. We have lots of missions, lots of work," says COL Keith Landry, Louisville District commander. "Finding them jobs helps in their recovery." Wounded warriors can be "detailed" somewhere to assist and work within the district organization and still be on active duty rolls, as is CPT Morrison. In addition, Louisville District's human resources department receives resumés of those still on active duty, soon to be out, and those already retired. Louisville District Civilian Personnel Advisory Center (CPAC) specialists review applicants' qualifications against open vacancies to place soldiers in jobs.

"I call [WWTs] right away," explained Jean Hull, a human resources specialist at CPAC. "I have to talk to them to find out what they would *like* to do." Often soldiers with specialized experience in the military desire a change. "They say, 'I was this MOS in the military, and now I want to do 'that,' meaning another thing," Hull said.


U.S. Army Corps of Engineers

Determined to help these soldiers, she sometimes refers WWTs she can't place to other government organizations, such as the Military Entrance Processing Station (MEPS) on the fourth floor of the building. "This one had been an Army medic, and I knew there was a vacancy for that skill set at MEPS. I provided them a lead," Hull said. She also calls other installations' human resources departments to inspire more networking.

Although there are more resumés than jobs to fill, Hull isn't dissuaded. Neither is Diane Hibbs, Louisville District human resources chief. "Where there's a good fit, we are going to use this program to help soldiers get employment," Hibbs said. She strongly encourages supervisors to consider hiring WWT applicants at field sites, or as administrative support or specialized support. Often, these soldiers will have already earned veterans or education benefits, allowing them to return to school and qualify for Louisville District jobs.

Hibbs hopes that the work that the Louisville District does to employ wounded warriors will set an example for other districts to emulate. The better known the program becomes, the greater its reach will be. "Installations traditionally have encouraged hiring WWTs, but the program in just this past year is gaining momentum Army-wide," Hibbs said.

The WWT initiative is also close to COL Landry's heart—he was seriously injured while rappelling during Ranger School when the rappel master "cut his rope" during a training exercise. While awaiting the results of his medical review board, COL Landry found a job as a civil engineer until he grew healthy enough to seek a return to active duty. "It wasn't glamorous," he said, "but it gave me a sense of purpose in life."

He can appreciate the vulnerability a wounded warrior feels when facing recuperation from an injury. "A job adds purpose and structure," COL Landry said. "Working for the Army Corps of Engineers allows soldiers to experience a feeling of selfless service to the nation as they did prior to their injuries." ★

Carol J. Labashosky *began her career as a writer and civil servant in 1985 after graduating with a journalism degree from the University of Wisconsin. A public affairs specialist for the U.S. Army Corps of Engineers, she has contributed articles and photographs to* Soldiers *magazine,* Recruiter Journal *and* Engineer Update, *among others.*

'You Go to War With the Army You Have'

Principles of Design For the Army The United States May Need

By COL Gregory Fontenot
U.S. Army retired
and
COL Kevin Benson
U.S. Army retired

Despite the long list of things that former Secretary of Defense Donald Rumsfeld got wrong, he was right in concluding that "you go to war with the Army you have." For that very reason, the debate over the shape of the future Army, which has continued for more than two centuries, is an important one. The United States can ill afford to get long-term force design and structure too badly wrong.

"Every age had its own kind of war, its own limiting conditions and its own peculiar preconceptions," Clausewitz wrote. In our own time we have seen the conditions of

war and our own preconceptions change, and, as LTG James Dubik, U.S. Army retired, wrote in the March issue of ARMY, "the chameleon of war is changing yet again." The pace and nature of change of the "chameleon" of war require serious debate based on reason and reflection, particularly with respect to the shape of the Army and the tack it might take during war.

The fundamental forces that drive how the Army is organized are largely outside of its control. For that matter, the Army has never enjoyed much control over its shape and purpose for reasons that are bound up in the history of the United States and the development of the U.S. armed forces. In addition, the purpose for which the Army exists varies as a consequence of policy, the environment in which it has operated historically and that in which it might operate in the future.

The basis for the U.S. Army is spelled out in the U.S. Constitution, Article 1, Section 8—better known as the war powers or military clauses of the Constitution. In developing these notions, the founders intentionally divided the ground forces by granting Congress the power to "raise and support armies" and to call out the militia to "execute the laws of the union, suppress insurrections and repel invasions"—tasks that, one might assume, fall to the Army. While the Constitution is quite specific about the tasks of the militia, it is much less so concerning what the "armies" that it might raise would do. This decision basically stemmed from fears that a regular army constituted a threat to the new nation, a view not without foundation. Indeed, there were several mutinies and near-mutinies toward the end of the Revolutionary War; the most famous of these ended with George Washington's address to disgruntled, fractious and unpaid Army officers at Newburgh, N.Y., in March 1783.

The fundamental forces that drive how the Army is organized are largely outside of its control. For that matter, the Army has never enjoyed much control over its shape and purpose for reasons that are bound up in the history of the United States and the development of the U.S. armed forces.

Problems stemming from the bifurcation of the ground forces into state and federal are both endemic and systemic and have remained so from the outset of the Army's history. There has always been tension between the states and the federal government regarding the role each of the forces should play. Obviously, the decision to employ guard forces as an operational reserve rather than as a strategic force has exacerbated the problem. But it is not a new problem and is not likely to change, short of a constitutional amendment that alters how Congress raises and maintains ground forces.

Beyond the distinction of an active army and the reserve components, there is a fair amount of hue and cry these days over the use of contractors, and the implication of some of the arguments fundamentally misses the point, or at least the context, of how and why contractors have come to be used. First and foremost, contractors (or their ilk) have always been part of the way Congress has executed its war powers. For example, in February 1781, Congress chose Robert Morris to head the newly created office of Superintendent of Finance partly in response to Congress' failure to provide for the Army, which resulted in famine and mutiny among militia units in the winter of 1780–81. Seeking savings, Morris used contractors to feed and clothe the Army. Even then, serving officers did not approve of contractors. Indeed, according to historian Russell Weigley, GEN Washington "denounced the chief contractor as a practitioner 'of dirty tricks,'" yet he also noted that his soldiers were "better covered, better clothed and better fed than they have ever been." Congress has partaken of the same wisdom several times, most recently with the so-called logistics civil augmentation program contracts of the 1970s. But these contracts afforded apparent savings by reducing the number of logistics units both in the active Army and the reserves. This decision stemmed from the assumption, drawn from analyses of the 1973 Arab-Israeli War, that if it went hot, the Cold War would not last long. Moreover, it still looked like a good idea after Operation Desert Storm enabled continued reductions in units in the interest of savings. In a long war, however, the "bargain" does not seem as good.

Placing this bargain in historical context, the Army consisted of fewer than 600,000 Regular Army troops—slightly more than the Army has in the active component today—when North Korea invaded the south in July 1950. Yet the Army's combat formations were sadly under-

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***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he concluded his career in 1999 as commander of the Battle Command Training Program. He is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is currently director of the University of Foreign Military and Cultural Studies. **COL Kevin Benson**, USA Ret., served as director, School of Advanced Military Studies, and as the director of plans, C/J-5, Combined Forces Land Component Command and Third U.S. Army at the opening of hostilities in Iraq, from 2002 to 2003. He works for McNeil Technologies and is currently a seminar leader at the University of Foreign Military and Cultural Studies.*

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strength, operating at an average of two-thirds of optimal numbers. Also, in the summer of 1950, soldiers did virtually everything, running maintenance on posts, camps and stations, and performing nearly all support functions in active theaters; today contractors and/or civil servants do many of the tasks associated with basic support, both in garrison and in the field.

The forces that drive the structure of the Army are not within its absolute control, nor are the vagaries of policy. This ambiguity allows us to divide the activities characteristic of war into two main categories: preparation for and execution of military operations. The structure of the Army is influenced by and subsequently influences the preparation and use of force in war. As Clausewitz wrote, "The degree of force that must be used against the enemy depends on the scale of political demands on either side." The study of history reveals that the nature of political demands changes during the period of preparing for war and during the conduct of war. The reality of war in the 21st century requires professional officers to render politically aware military advice both before and during the conduct of war.

In recent testimony before the Senate Armed Services Committee, Secretary of Defense Robert M. Gates said that his service in the department revealed what he called underlying flaws in the priorities, "cultural preferences" and "reward structures" of the entire defense establishment. His view of the department is that the defense institution is arranged to develop plans for future wars, is predisposed to prepare for short wars and is not at all set up for waging a protracted or long war. Most telling, he informed the committee that "our procurement and preparation for conventional scenarios must … be driven more by the actual capabilities of potential adversaries and less by what is technologically feasible given unlimited time and resources." The inclusion of the consideration of adversaries' actual capabilities in both the conventional and irregular domains will seriously affect force structure decisions. He also said that "the U.S. military must be able to dissuade, deter and, if necessary, respond to challenges across the spectrum—including the armed forces of other nations." Policy indeed has an effect on the decisions that build and sustain our Army.

As Secretary Gates has begun to articulate policy for the development of the near and midterm, he has been justifiably vague. Until such time as the administration articulates its long-term policy, the United States will continue to field forces in the near term that reflect Secretary Gates' predecessor's unfortunate aphorism. Today's Army has adapted rapidly since 2001, while waging war in two separate theaters and maintaining global commitments, and has demonstrated resilience and dynamism to soldiers from other countries. A few years ago in a classroom at Fort Leavenworth, Kan., a foreign soldier passionately expressed his admiration for the U.S. Army's capability to assess and rapidly effect fundamental changes in doctrine, organization and equipment: "No other army could have done what the U.S. Army has."

So what are the means to maintain a rapidly adaptable force? In our March article in ARMY, we argued that armies achieve adaptability as a consequence of a culture that values education and training. Yet how the force is composed—and generally how it is structured—is not irrelevant. In that same article, we opined that general purpose forces provided the best option for an ambiguous future. What, then, are the principles for developing and sustaining those forces over time?

Operations Just Cause and Desert Storm confirmed for many that short, decisive wars—in which airpower proved central, if not decisive—would be the norm from 1992 on. Clearly this expectation has not come to pass.

Army leadership determined that modularity at the brigade level is the best means for meeting requirements now and in the future and that Army force generation (ARFORGEN) is the method for sustaining the most important commodity in those forces—people.

Operations Just Cause and Desert Storm confirmed for many that short, decisive wars—in which airpower proved central, if not decisive—would be the norm from 1992 on. Clearly this expectation has not come to pass. Some also argue that the events that unfolded in Iraq and Afghanistan that led to protracted counterinsurgencies will not occur again. This school argues that the armed forces must return at least some level of attention to conventional warfare featuring large tactical formations enabled by airpower. Yet another group argues that the United States could, with judicious use of advisers, preclude insurgencies or at least enable indigenous forces to fight them successfully. There is presently no consensus either on policy or on the shape of operations to come.

In the early years of World War II, COL Frederick M. Barrows, the editor of *Military Review,* wrote a number of insightful articles on the organization and structure of the German army. In March 1941, he discussed the German panzer divisions and their structure. He found that both the German and U.S. tank divisions were organized in similar fashion, with a high number of tanks. Subsequently, both armies altered their organizations, greatly reducing the number of tanks assigned while increasing the number of divisions. They did so for two essential reasons: to improve command and control and to increase flexibility. Both also organized their tank divisions to exploit penetra-



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tions achieved by infantry and pursue dislocated forces in the enemy rear. Form followed function.

In 1942, COL Barrows expanded his discussion of German principles of design in an article entitled "The *Einheit* Theory." According to COL Barrows, *einheit* meant simply unit or unity; substantively, the *einheit* principle is not unlike the U.S. Army concept of modularity, except that the Germans sought to make all of their units similar in fundamental ways with basic means of sustainment, for each type or branch of the formation to afford rapid task organization. In principle, the United States followed that model of task organizing as the means to develop formations until adopting the current brigade combat team (BCT) as a unit of employment (which is deployed by U.S. Forces Command in response to requirements from combatant commanders as tasked by the Army). Task organization remains part of the concept for design in Army forces, but is no longer a central assumption of tactical formations in the brigade echelon because this echelon is "fixed." The culture within fixed formations precludes willing task organization. For example, Cold War border cavalry regiments seemed happy to receive attachments but loathed detaching internal assets.

Although in retrospect it may seem that anything the services wanted in World War II they obtained, nothing could be further from the truth. ... Equally important, the threat to the continental United States is more serious now, arguably, than it was during World War II.

The principal rationale for the design of the U.S. Army since the 1940s stemmed in great measure from GEN Leslie J. McNair. McNair did much of the basic work that produced the Army of 1945 in a year's time, starting with the activation of General Headquarters (GHQ) in July 1940 with a staff that never exceeded more than 21 officers, including McNair. In time, the staff grew and ultimately split into Army ground, air and service forces, but it was McNair and his small team from all of the branches who did the baseline work.

Although in retrospect it may seem that anything the services wanted in World War II they obtained, nothing could be further from the truth. The United States spent lavishly during World War II, much more so than it has at any time before or since, but McNair and his staff at GHQ—and later Army ground forces—continuously made difficult choices to glean the most combat capability from the least cost in men and materiel. Several principles McNair developed served the Army well in World War II. The Army might benefit from reviewing those principles today as it wages a long war while being able to respond to short-notice expeditionary requirements. Equally important, the threat to the continental United States is more serious now, arguably, than it was during World War II.

McNair needed to design, mobilize, train and deploy forces on a fairly short timeline. Typically units deployed with at least 12 months from formation. The Army also had to account for the deployment capacity of break-bulk transports and their availability. Once the United States entered the war, manpower became a challenge. Despite the phenomenon of Rosie the Riveter, the United States did not enjoy a limitless pool of manpower.

Accordingly, McNair and his staff continuously took into account the echelons at which they expected both administrative and tactical responsibility. They also "slimmed" formations, according to the authors of *The Organization of Ground Combat Troops*, to "concentrate a maximum of men and materials in offensive striking units," thus requiring a force design that held "down nontactical overhead (logistics and headquarters)." This design philosophy also sought to reduce the numbers and types of specialist organizations. Low-density specialist organizations make the already inefficient business of warfare even more so. In addition, McNair and his team refined the notion of pooling units at higher operational echelons for use as required. Specifically, air defense artillery, tank destroyers and independent tank battalions were intended to be pooled, although in practice these units eventually were habitually attached to the divisions they supported so as to promote more effective combined arms efforts. None of this is particularly inconsistent with a brigade-based organization, but some brigade combat team units might be better trained by formations other than the brigade.

Of greater import for future designs is the examination of the competing and sometimes contradictory demands of long-war units and units that should be ready for rapid deployment to address unexpected contingencies or possible contingencies for which combatant commands plan. In addition, the question of which forces should be assigned to U.S. Northern Command (NORTHCOM) in support of "first-responder" missions associated with homeland defense and how they should be equipped requires consideration.

Potentially the Army could redesign forces for specialty roles while adhering to the spirit of unity. For example, the Army might reequip some National Guard formations to operate as first responders within the brigade combat team organization while retaining the basic structure of BCTs. The core mission essential task list for those units would reflect a primary role in support of the state and federal missions in the context of NORTHCOM. They could retain a second "strategic" reserve mission as con-

ventional combat forces within the current ARFORGEN framework. In addition, some National Guard divisions could be trained and equipped with the primary mission of command and control over first-responder missions. There are potential pitfalls with such a course of action, including political objections from some states that will not want to give up primary Reserve missions and some states that might want to press for an exclusive homeland defense mission.

In any case, some of the Reserve formations will continue to function as an operational Reserve in support of Operations Iraqi Freedom and Enduring Freedom, which will continue in some form for several years. The Army must also retain the capacity to respond to contingency operations. How many troops this will require can only be gauged by understanding the limits of using contractors for operational purposes in high-risk operations early in deployments. Some contractors will be required, but the Army must have adequate combat support formations to provide at least early-entry support. This problem is not new.

Writing in the Summer 1975 *Strategic Review,* GEN James H. Polk advanced two arguments germane to this problem. First, he asserted that after the 1973 Arab-Israeli War, many observers, military and civilian, concluded that future combat operations would be "short and very violent." Second, he argued that the conventional wisdom of the moment was that the Army could take some risks in supporting the Army in Europe by keeping more of the combat service support capability at home in the continental United States while asking the Germans to meet more of the logistics support problems in Europe with West German territorial army units. GEN Polk's decision stemmed from directives from the Office of the Secretary of Defense to generate more combat forces in Europe at the expense of combat service support. Along with closing the gap by using West German territorial forces, other ideas included greater use of contractors and allowing units to requisition supplies and some equipment directly from the depots. According to GEN Polk, none of these ideas met the test of cost versus benefit, from his perspective as a one-time commander in chief of U.S. Army Europe and Seventh Army. Specifically, he concluded that none of these measures provided effective, flexible support. "The prudent war planner," he said, "would like to hedge his bets and be ready to adapt quickly to almost any foreseeable situation." This sounds hauntingly familiar and could have been written after the Franco-Prussian War, the 1967 Arab-Israeli War or Operation Desert Storm, and it certainly was on the minds of U.S. Central Command and Defense Secretary Rumsfeld during Operation Iraqi Freedom.

Fighting in two theaters of war has produced a tempo of operations for all components of the Army that far exceeds what Department of Defense planners ever imagined. That anyone is surprised seems remarkable given the history of the United States, and most other countries, for that matter. Planning for an uncertain future in the midst of a very difficult present is unlikely ever to be perfect. If we have learned nothing else from the last eight years at war, that, surely, is the salient lesson.

Fighting in two theaters of war has produced a tempo of operations for all components of the Army that far exceeds what Department of Defense planners ever imagined. That anyone is surprised seems remarkable given the history of the United States, and most other countries, for that matter. Planning for an uncertain future in the midst of a very difficult present is unlikely ever to be perfect. If we have learned nothing else from the last eight years at war, that, surely, is the salient lesson. Just how it will affect the behavior of policymakers in and out of uniform remains to be seen, but the Army should argue vociferously as a matter of duty to preserve sufficient structure to meet current commitments and to allow reasonable operational and strategic reserves to defend our country, wage the long war and respond to short-notice contingencies. That means more troops and making the best use of those that we have by designing general purpose forces that take advantage of efficiencies conceived by McNair and his team, including pooling, slimming and task organizing. Finally, we must also accept the need to use civil service and contract work forces where possible to free up soldiers for tasks that only they should do.

Given this reality, and the fact that war is conducted in the realm of uncertainty and chance, we cannot afford an Army optimized for only one point on the spectrum of conflict. Further, the officer corps must be educated for critical thinking in this uncertain age. The need for officers who can render politically aware military advice, *à la* George C. Marshall, Leonard T. Gerow and Colin L. Powell, is essential as we must plan how to end the period of persistent conflict we face on terms that are favorable for the United States and the world. ★

In Tribute to Of America's



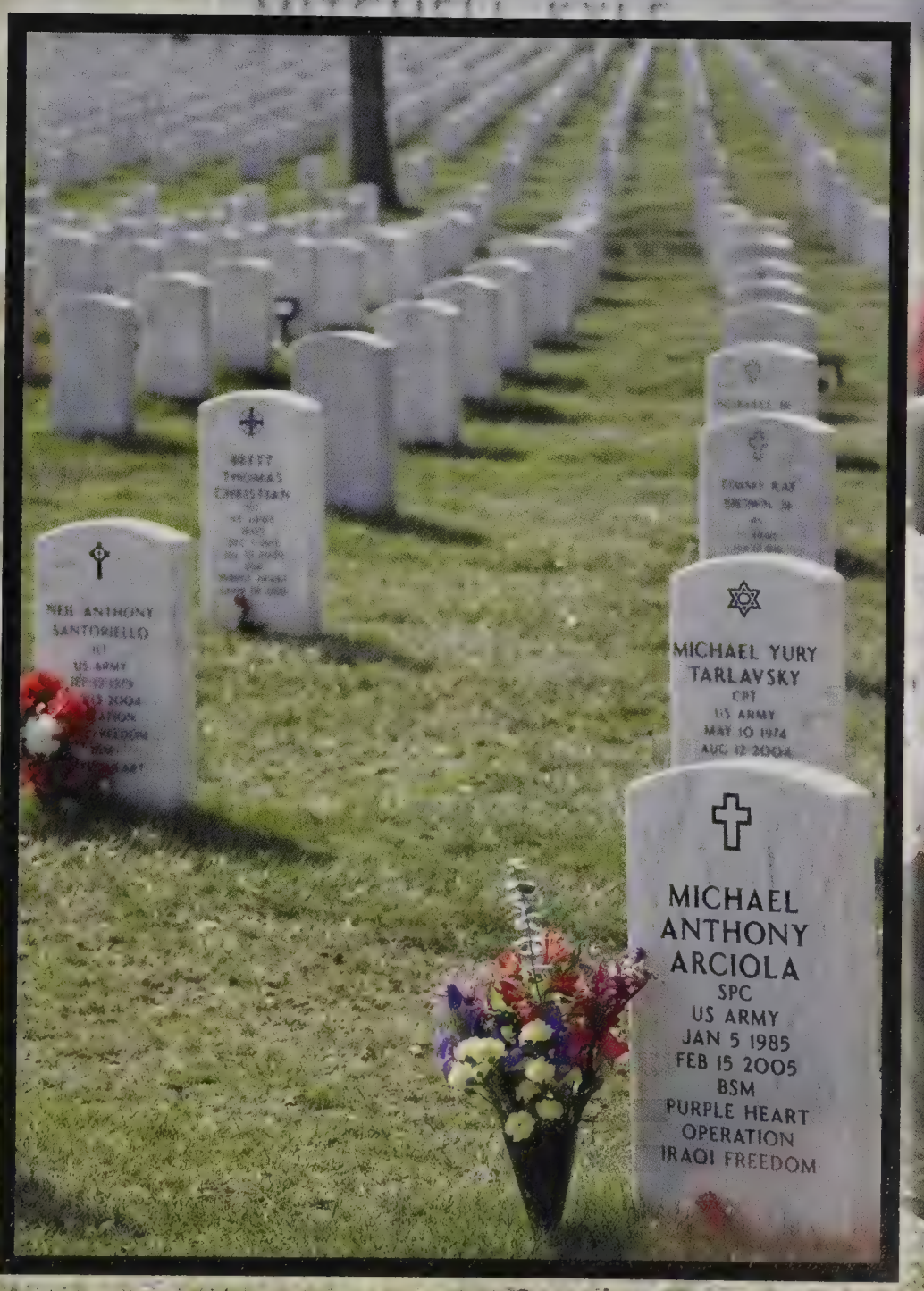
Headstones in Arlington National Cemetery reflect the diverse backgrounds of those who served in Iraq and Afghanistan. Buddhist wheel of righteousness, Muslim crescent and star, Angel Moroni of the Church of Jesus Christ of Latter-day Saints, Wiccan pentacle, Christian cross and flame of the United Methodist Church, tepee of the Native American Church of North America, Christian cross and Hebrew Star of David mark resting places of disparate fallen united by their willingness to make the ultimate sacrifice for a grateful nation.
(*Photographs by Dennis Steele*)

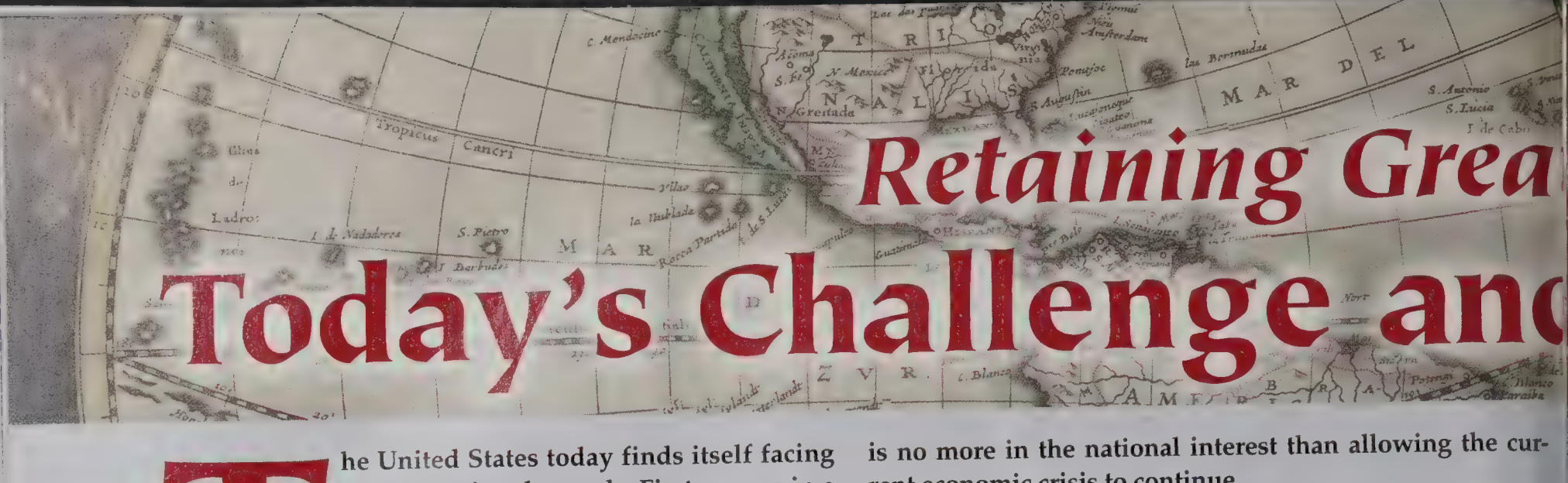
he Diversity Warriors











Retaining Great Today's Challenge and

By LTG James M. Dubik
U.S. Army retired

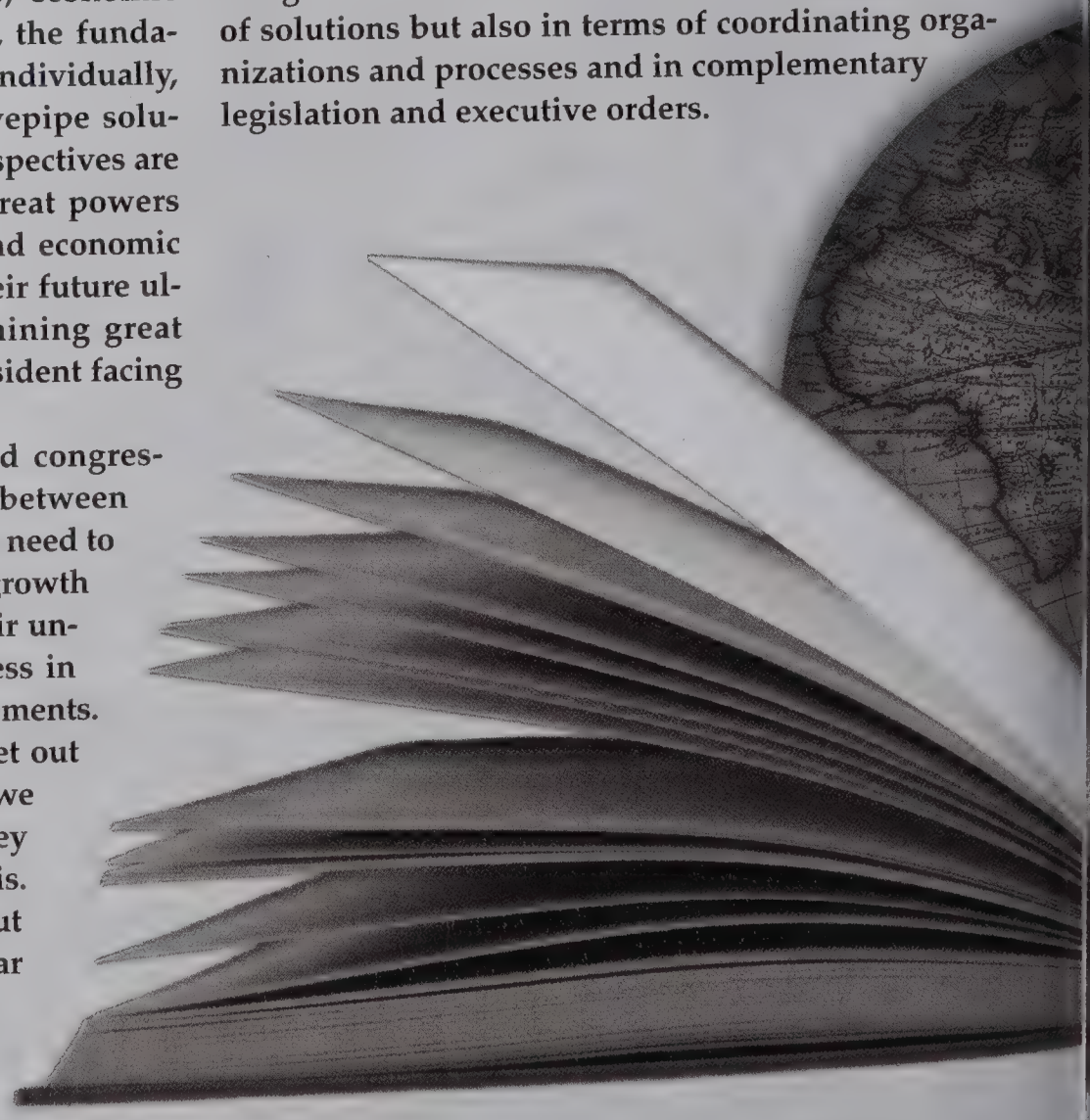
The United States today finds itself facing three pressing demands. First, we are in a global war that we cannot afford to lose, but we cannot continue to fight it as we have. Second, we are in a global economic crisis that we have to resolve, but we cannot resolve it at the expense of losing the war. Finally, the war and the economic crisis are immediate problems, but we cannot lose sight of the need to invest in our future productivity. Paul Kennedy's *The Rise and Fall of the Great Powers* is both a history lesson and a reminder. The history covered in the book demonstrates that America risks decline, as have other great powers that were unable to balance the three requirements we face today. The book's reminder is this: The rise and fall of great powers has not ended.

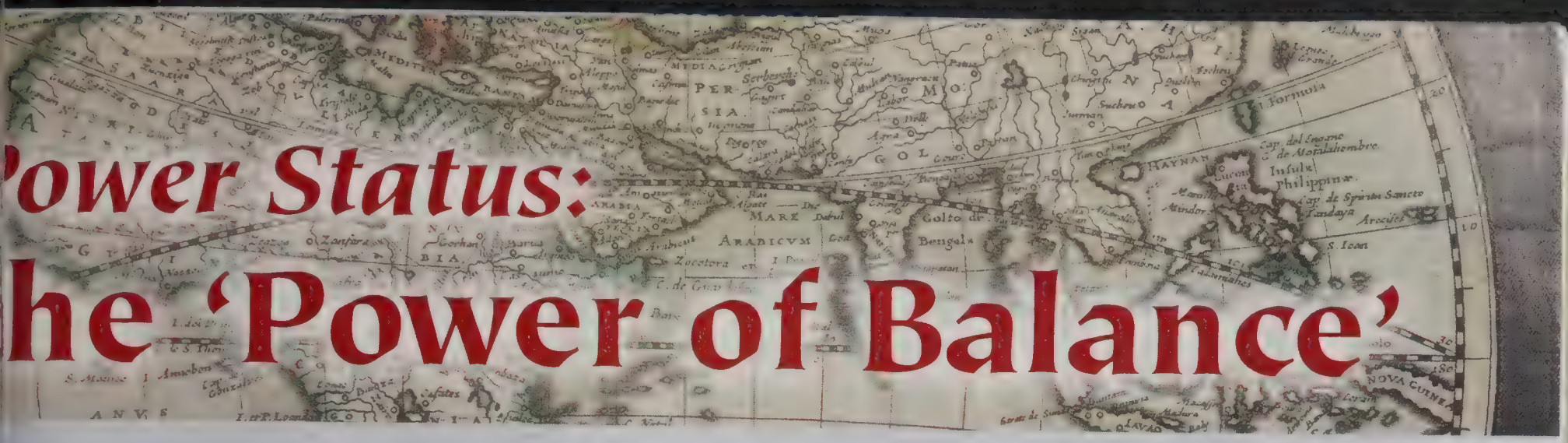
For many people, Kennedy's *Great Powers* is a warning not to overreach with respect to a great nation's security requirements. It is also an argument against stovepipe solutions to the problems that great powers face as well as an argument for a balanced approach to the three areas in which great powers must succeed: security, economic strength and growth. According to Kennedy, the fundamental issue is to not look at each problem individually, for they are interconnected as a whole. Stovepipe solutions that look good from one of the three perspectives are really nonsolutions in the long run. Even great powers that can solve both their national security and economic challenges but do so by underinvesting in their future ultimately decline. Balance is the key to retaining great power status—a good reminder for a new President facing all three challenges.

President Barack Obama, his Cabinet and congressional leaders seem to understand the link between solving the immediate economic crisis and the need to do so in a way that contributes to our future growth and productivity. What is less apparent is their understanding of the connection between success in the war and the other two great power requirements. Rather, there appears to be a temptation to get out of Iraq and Afghanistan as expeditiously as we can and to cut defense spending so that money can be moved to help with the economic crisis. This temptation is real, and it is powerful—but it is wrong. No doubt some money for the war and other defense spending could be diverted. Similarly, however, losing the war is no more in the national interest than allowing the current economic crisis to continue.

The American objective should be this: Find a set of strategies that together contribute to solving the national security *and* the economic and growth challenges we face. Such strategies commonly emerge only through a thorough and clear understanding of each of the three great power requirements as they are manifested today and a series of inclusive discussions with the American people and among leaders from the government, military and private sectors. Such discussion must be informed and must begin with sufficient consensus concerning national, strategic objectives in each category.

Given the dynamism involved in the multiple aspects of our economic situation and the importance of getting a set of solutions mostly right (or "right enough"), practicality—not ideology—must reign. Thorough, open discussion and compromise—essential democratic values—must guide our collective decisions and actions. There will be no perfect solutions, only imperfect ones that will have to be adjusted as conditions change. All involved recognize that we must be innovative—not only in terms of solutions but also in terms of coordinating organizations and processes and in complementary legislation and executive orders.

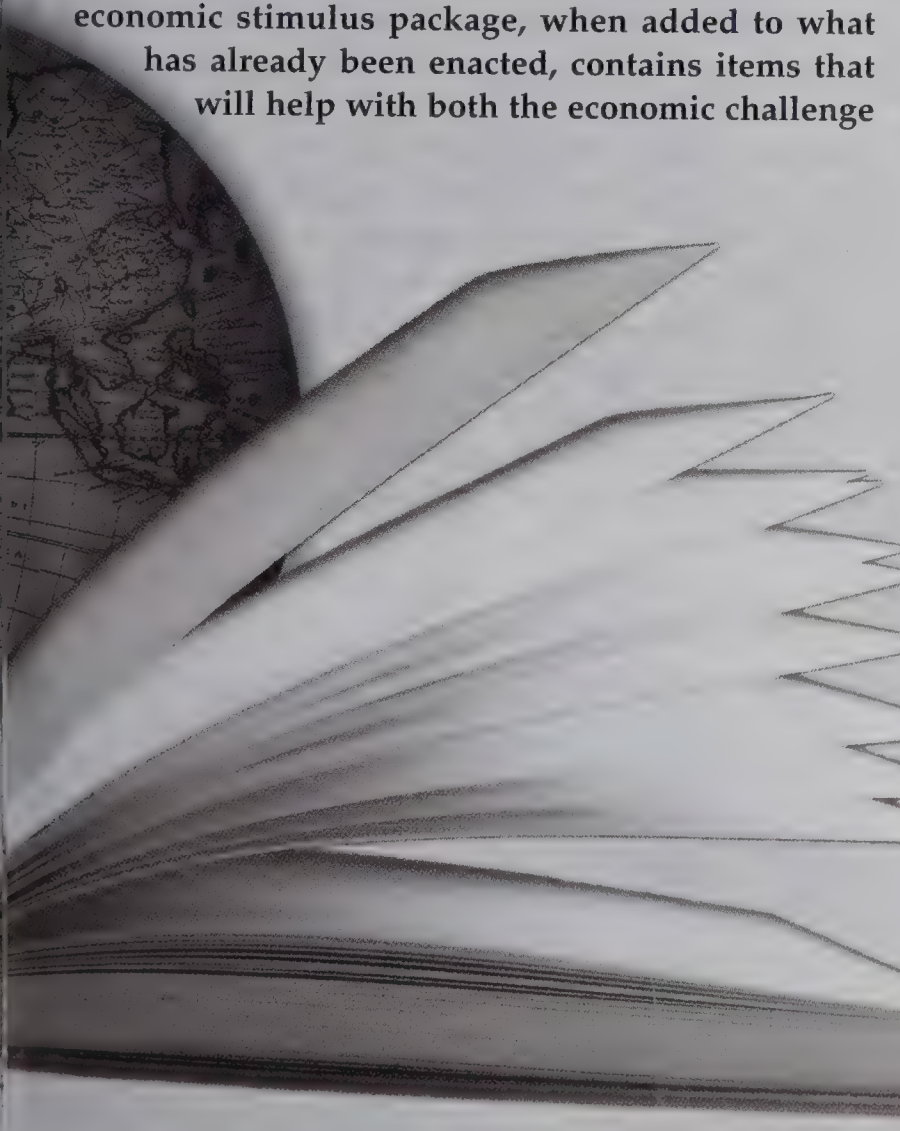




ower Status:
he 'Power of Balance'

Continuing along this tack, the nation needs a similarly informed, broad-based discussion about the war we are fighting, and the war's relationship to the other aspects of America's great power requirements. We are not fighting two wars. We are not fighting "mere" terrorists or criminals. We are fighting a global insurgency, declared and waged by a transnational nonnation movement. Insurgencies are complex and protracted wars; wishing they were otherwise won't change the facts. Understanding this war, unique in many ways, will be the first step in understanding the security aspect of the three great power requirements.

With respect to the economic crisis, everyone recognizes the need for a global response. President Bush recognized this when he called for an international conference to address the problem. President Obama has accelerated this work. An individual nation can do a lot to reform, improve and shore up its financial systems; create jobs; and help both its citizens and corporate sectors—all according to its political position and sociocultural disposition. But as the crisis is a global one, so, too, must be the response. Decisions and actions taken in one country or region affect those in another. The nation's economic stimulus package, when added to what has already been enacted, contains items that will help with both the economic challenge and the challenge of investing in our future productivity. Furthermore, the total package recognizes that protectionism is no more a solution to our economic situation than unilateralism is to our global war.



Just as the economic crisis is global, so is this war. A one-nation solution for either, important as they are, will be insufficient. Success against a global insurgency will require a global counterinsurgency strategy, one with the proper mix of civil and military components. All insurgencies are civil-military problems; none can be solved by military action alone. Concerted military action is absolutely necessary, and military action will be needed for the foreseeable future, but it must be in sync with diplomatic, political and economic action. We need a coherent, multinational, civil-military approach with a corresponding set of multinational, civil-military coordinated mechanisms.

Some of the key questions concerning our global war include: Can we and our allies and partners structure a global counterinsurgency strategy? Will we be able to identify how to succeed in the active theaters—to foster improvements in Iraq and regain the initiative in Afghanistan—while also attending to the priority actions needed in other theaters, such as Africa, South and Southeast Asia, and Europe? Can we structure the civil portions of the global, civil-military counterinsurgency strategy such that they both help in the defeat of the insurgency and contribute to economic recovery? Can we figure out how to help local governments in the multiple theaters of war improve the services they provide to citizens in ways that help with the economic crisis?

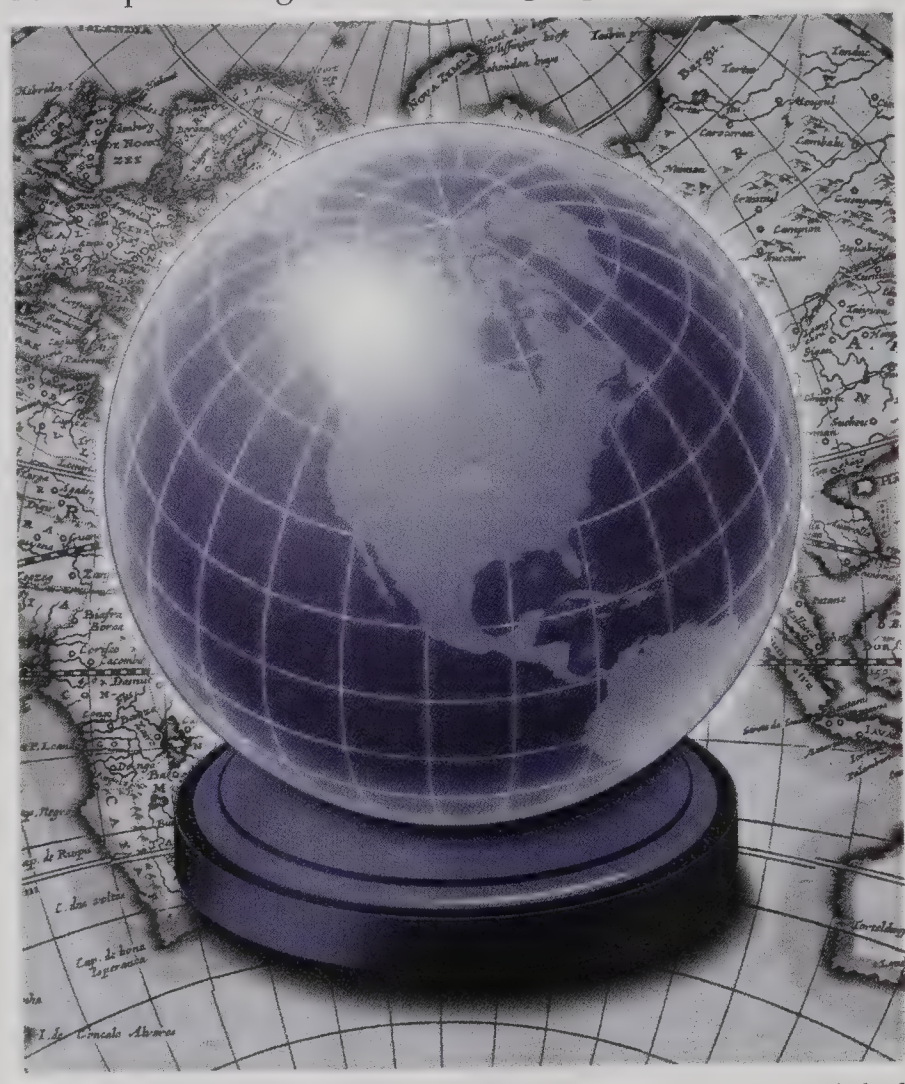
Status as a great power can be lost in more than one way. It can be lost by winning a war while destroying one's economy, and it can be lost by losing a war that is tied to one's national interests in order to save one's economy. Life as a great power is not an either/or affair. It's an affair of balance. A solution to the global economic crisis at the expense of one to the global insurgency, or vice versa, would be counterproductive.

The third challenge that great powers face, growth (investment in our future productivity), also has a global dimension, and it is linked to the global insurgency. Individual nations should do what they can within their borders according to their own priorities and citizens' needs. International, as well as national, action is necessary. It's no surprise that the terrorists we fight recruit from many areas that have one or more of the following characteristics: an oppressive

"Reform and stability are not mutually exclusive but mutually reinforcing—and ultimately mutually essential."

—Kenneth Pollack, *A Path Out of the Desert*

political environment, a depressed economic situation with little hope for improvement and marginalized living with little hope for integration into a larger, promising future.



What can we do that might help not only with the global insurgency but also with both the economic and investment crises? In his book *A Path Out of the Desert*, Kenneth Pollack points out that "reform and stability are not mutually exclusive but mutually reinforcing—and ultimately mutually essential." Is there a way, as Pollack suggests, for "the United States and its allies in Europe and Asia [to] support a gradual process of economic, political and social transformation in the Muslim Middle East—albeit one different from the way we have done so in the past"? Reform and stability set conditions for economic growth. Is it possible for the United States and its allies to construct a coordinated, gradual process, as Pollack describes, to help not only on the global security front, but also on the global economic front? Could the World Bank or some other—perhaps new—organization provide "matching contributions" to be used for economic or internal development in a nation willing to spend its money to help counter the global insurgency?

The situation that the United States is in is not as simple as "a war and an economic crisis." Rather, we face the trifecta of the great power balance challenges, and we face it together with allies and friends. With the change of administrations, the United States has an opportunity to rethink its national strategy as well as the perspectives from which it approaches that strategy. The status quo is not a satisfactory approach, with respect to the war or the economy.

A great power will stay great only to the extent that it can be innovative, tough and stalwart. Following World War II, our predecessors worked hard to innovate in all three areas. NATO, the United Nations, the International Monetary Fund, the World Bank, the Bretton Woods agreements … all came about during a period in which national security, economic and development challenges merged. For the most part, the nations that were included in these innovations have flourished. Those that opted out or were left out, by and large, have not. At the time, each of these innovations was designed to benefit all those who were involved, including the United States. Enlightened, broadly understood American self-interest was an important component—the spark, one might even say—to the innovations that helped right the world following World War II.

Today we face a similar triple great power challenge. The reasons differ, as do the players and the temper of the times, but the challenge is the same. Once again, our answer must be bold innovation. We may not need another Marshall Plan, which was President Truman's singular priority, but we do need enlightened, broadly understood American self-interest to help guide our national leaders to a complementary set of innovative, national and international solutions—while working with like-minded nations.

There is no guarantee of retaining great power status. The decisions and actions each great power has made over time either strengthened or eroded its position. The United States is not exceptional in this regard. We will retain our status only if we can lead the way toward balance, not just within America, but, given the global nature of our triple challenge, among nations. Will we? ★

LTG James M. Dubik, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.

Further Reading

Pollack, Kenneth, *A Path Out of the Desert* (New York: Random House, 2008)

Behrman, Greg, *The Most Noble Adventure: The Marshall Plan and the Time When America Helped Save Europe* (New York: Simon & Schuster, 2007)

2009 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its fourteenth ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2008.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints, color prints or color slides. Photographs must not be tinted or altered. (Send digital photos to jdow@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The smallest format for slides is 35mm, and slides must be in plastic or paper mounts.
7. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, Social Security number (for identification and tax purposes), address and telephone number, and caption information.
8. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
9. Entries must be postmarked by June 30, 2009. Letters notifying the winners will be mailed in September.
10. Entries will not be returned.
11. Employees of AUSA and their family members are not eligible.
12. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
13. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jeremy Dow (jdow@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.

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Developing a Great Commander/ First Sergeant Relationship

A great commander/first sergeant (CDR/1SG) relationship is make or break when it comes to being an effective unit. Some of us are graced by God (seriously!) with that nail-eating, rust-crapping 1SG who lives and breathes excellence. Others of us are not so lucky. To be fair, these expectations go both ways, right?

Great relationships don't just happen. A lot goes into making a relationship work. This month, we want to tap into our collective experience and capture practical things we've done to foster a great CDR/1SG relationship. So, we ask: What is one thing that has worked for you when it comes to developing and fostering a great CDR/1SG relationship?

Mike Eliassen

C & HHC/1-506 IN, 4/101

Simply put: PT, breakfast, lunch and dinner. Before we deloyed, my 1SG and I ate breakfast and lunch together often. Most days we did PT together. And we always left the office ogether. While deployed, it was the same thing. The Soldiers ee this. They see us together, and they see us working rough issues that come up in the company. To be of one ind is to be inseparable. This is what we tried to achieve rough long hours working toward a common goal. What as made things easier is a common belief system—morally, thically and on things Army. We've agreed to disagree on ings in private, hammering out the details to present a front at both of us can live with. We both often joke that it is uch like our marriages and how we deal with our children—eep a united front, or the buggers will wear you down.

Brian Waters

C Co., 62nd Engineer Combat Battalion

I got a new 1SG just weeks after taking command. As uch as I hate the idea of "lanes," I think that it contributed reatly to starting off on a good foot. We sat down for his inial counseling, which was really just a two-way discussion, nd I let him tell me what he thought his role was. I used that s the starting point. While I've certainly got an opinion on verything, I kept my mouth shut on anything in his lane hile it was in progress. By allowing him space, I found him oming to me to discuss those matters more and more, and I ould do likewise. After about four months, there was a feelg that we could bring up anything to each other without isue. I think the key was empowering him by letting him estabsh himself on certain issues, and doing the same myself.

Once we deployed, I would echo what Mike said about eating together. We would do PT and eat all meals together when we weren't out on mission. Halfway through the deployment, I had a change of 1SGs and kept up the same habits. Being deployed, it all comes down to effective communication—discussing certain matters in private and getting on the same page to present a united front.

John Hollein

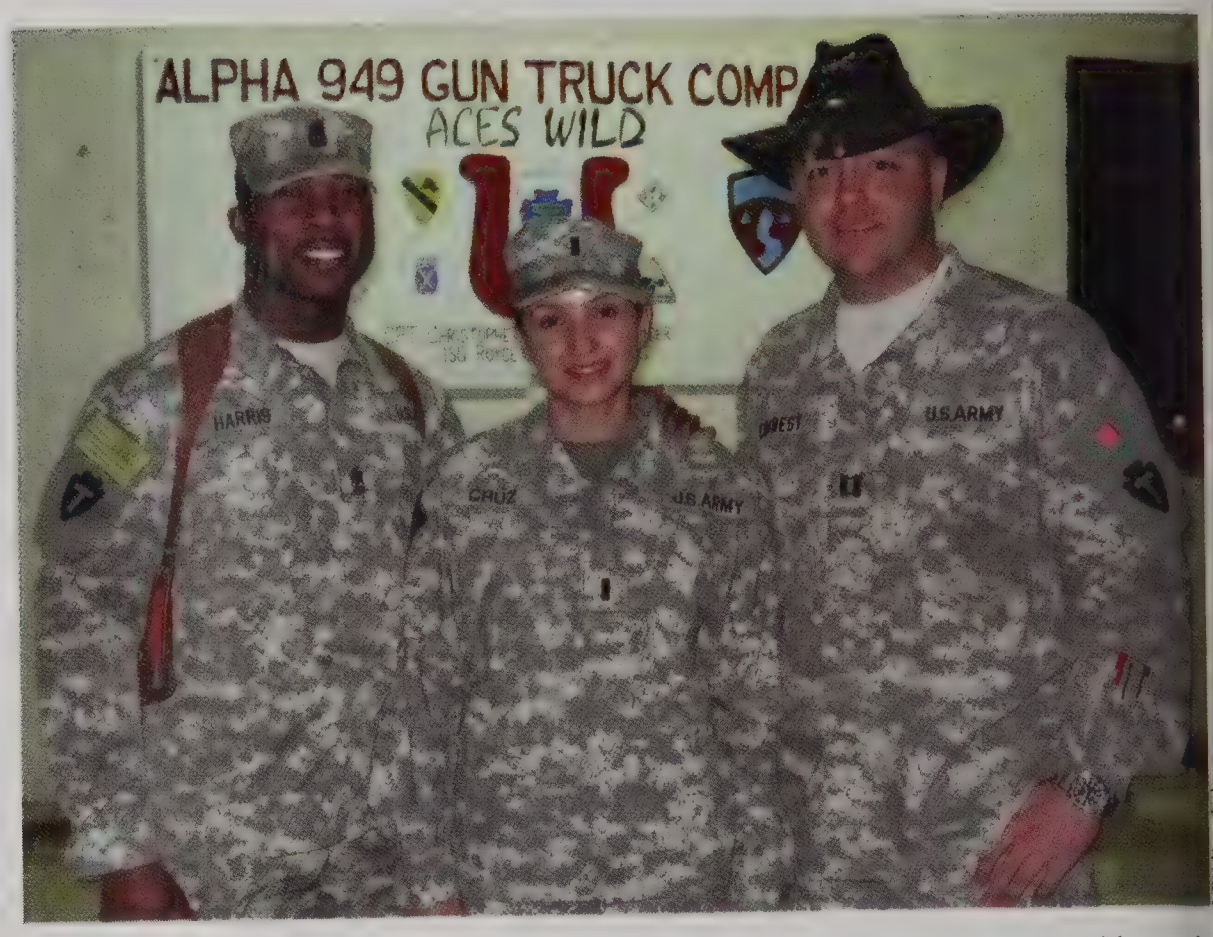
HHD, 61st Multifunctional Medical Battalion

I'd like to revise "great relationships don't just happen" to "a functional relationship doesn't just happen." Many a CDR has had to put in double the work just to keep things civil with his 1SG. Regardless of how good (or bad) the personal relationship is, understanding and enforcing your professional responsibilities has to be the cornerstone upon which the foundation is laid. The thing that has worked best for me is knowing that if the 1SG does anything illegal, unethical, immoral or unsafe, the CDR is the only person in the company with the authority to rein him in. The CDR is the only one who counsels, rates and recommends the next three positions for the 1SG. That authority is the CDR's alone. So exercise it! This is something I wish I had had the courage to do sooner. Our 1SGs deserve to have honest feedback on their job performance, just as we do.

Christopher Combest

A Co., 949 Gun Truck Security

Each relationship is different. Personalities, hobbies, interests, etc., vary from person to person. I do not personally spend every waking hour with Top. We do, however, work together on every aspect of command, keeping each other informed of issues and decisions made. For me, it is a partnership, a marriage of sorts. The fact that our Troop-



1SG Royce Harris and CPT Chris Combest promote Brendaly Cruz (center) to 1LT at the Company A, 949 Gun Truck HQ in Al Taji, Iraq. 1LT Cruz, the 4th Platoon Leader, runs convoy security missions throughout Baghdad.

ers see us together in the proverbial unified front gives them a sense of stability and a happy home, so to speak. My "First Shirt" and I may differ on angles and courses of action from time to time, but when it comes to delivery, we will be on the same page. This is nonnegotiable for us, and it requires occasional compromise. Communication is key in this relationship—especially in a combat zone.

Jeff Sargent
B/501 MI, 2/1 AD

All the things mentioned are excellent, and I'll add something often not considered by junior officers—LISTENING. Many new commanders come in full of energy and want to run 100 mph, which isn't bad, but keep in mind your senior NCO has most likely seen and done it before. My 1SG and I shared a hooch during deployment, so we spent a majority of our time together, which definitely kept things running smoothly. Take an interest in his personal goals and his family. Never talk smack on your 1SG to your other officers, no matter what! One of our primary jobs as a commander is to train our lieutenants. The example we set with our CDR/1SG relationship will be the basis for how our lieutenants handle the same thing themselves while commanding. It also sets the example for them in their relationships with their PSGs.

Raul Rovira
HHC, U.S. Army Garrison Livorno

Café and cigars. Just like in a marriage, a little quiet time and communication go a long way. My first 1SG and I would always have café at the Italian bar at Darby (at 0830 and 1500). Those 15 to 20 minutes were so valuable. We'd go over work, family, personal plans and professional plans and even talk about camping with the Boy Scouts. Café time was always a special time for the 1SG and me. My second 1SG was more of the cigarette type. I occasionally smoke cigars, so I got a few small cigars. At least one to three times a week, we would have a smoke session. Just like with my other 1SG, we would talk about work, family and so on. The centerpiece of all this was communicating. Café and cigars were just things that help set the stage.

Ted Stokes
A & HHT 6-9 CAV

I add a caveat to my comments with the statement that in all of my 22 months of command I was blessed with amazing 1SGs. Not until I had a chance to look back did I understand how lucky I was to have the opportunity to work with such amazing professionals.

In my opinion, the most imperative requirement for a CDR/1SG relationship is a brutally honest understanding that everything that is decided, planned, executed or resourced is done for the good of the unit and its Soldiers. This common-ground agreement sets the bar for the relationship between the CDR and the 1SG and ultimately facilitates the success of the command-team relationship. In "the good of the unit and its Soldiers," I include all aspects of the unit's mission, training, administration and equipping, as well as the care of Soldiers' families.

There are times when you and your 1SG will disagree on an issue. However, as in all military organizations, decisions must be made, and the CDR is the individual charged with this responsibility. 1SGs are professionals and understand this concept, and as long as their guidance, recommendations and experience were considered in the decision-making process, they will typically support your decision and expend every ounce of energy to execute your intent.

Chris Brautigam
D/2-16 IN & HHC 4/1 ID

In both of my companies, I made my relationship with my 1SG my number-one priority, ensuring that he and I had the same vision for the company. Once we saw where we were going, we talked about how we were going to get there and the lanes we would work in. We also talked about the company XO and how we would utilize him. Our basic output from this was that the 1SG ran the company so that I could command it.

During my first command, which I took in combat, my 1SG and I sat down and talked every day. It usually started with events surrounding the company (our current missions, upcoming missions and so on) and then would usually turn into a BS session. The other things we discussed were our pe



The working relationship of CPT Chris Brautigam (left) and his 1SG in D/2-16 IN, William C. Zappa, became a model for junior officers, NCOs and soldiers at Forward Operating Base Rustamiyah in Baghdad.

nal strengths and weaknesses. This allowed us to complement each other's talents and, when necessary, to cover for e other's areas of weakness. After six months in this command, we operated seamlessly and anticipated each other's cisions, actions and questions. All told, I've been blessed th two great NCOs who tirelessly supported my commands d took as much ownership of the success of the company I did. At the end of the day, I think that our relationships—th personal and professional—were examples for my PLs d PSGs to follow, as well as a great outward sign of unity the junior NCOs and Soldiers to see.

Ryan Morgan
C & HHC/2-502 IN, 2/101 AASLT

I think that Chris has the right idea out the relationship when he said at the 1SG runs the company so he n command it. The CDR/1SG relanship is the critical one in the battal-n. I can remember having some very ferent points of view on quite a few isues with my first 1SG. Sometimes we uld go with his idea, sometimes with ne. This was important to both of us. told me that one of the best things I uld do for my PLs (and he for his Gs) was to show them that our relanship was strong and united. Fortutely, my 1SG and I got along very ll and agreed on the majority of isues. He was a new 1SG when I took mmand, and we grew into the roles ether. Probably the best lesson he ght me was how to cultivate a posi-e relationship with the battalion CSM, ich went on to pay huge dividends.

I know that one of the difficulties of the relationship was getting the PLs to work with the 1SG. I can remember many occasions when the PLs came to me to "get the 1SG to change his mind" on a particular issue. I knew that the 1SG had made the right call (although it was unpopular with the LT), and I would not overturn the decision. Recently, these PLs, now taking command of their own companies, expressed to me how they hated when I did that, but that now they understand. The bottom line is that by getting the CDR/1SG relationship right, there is little doubt that the company will succeed.

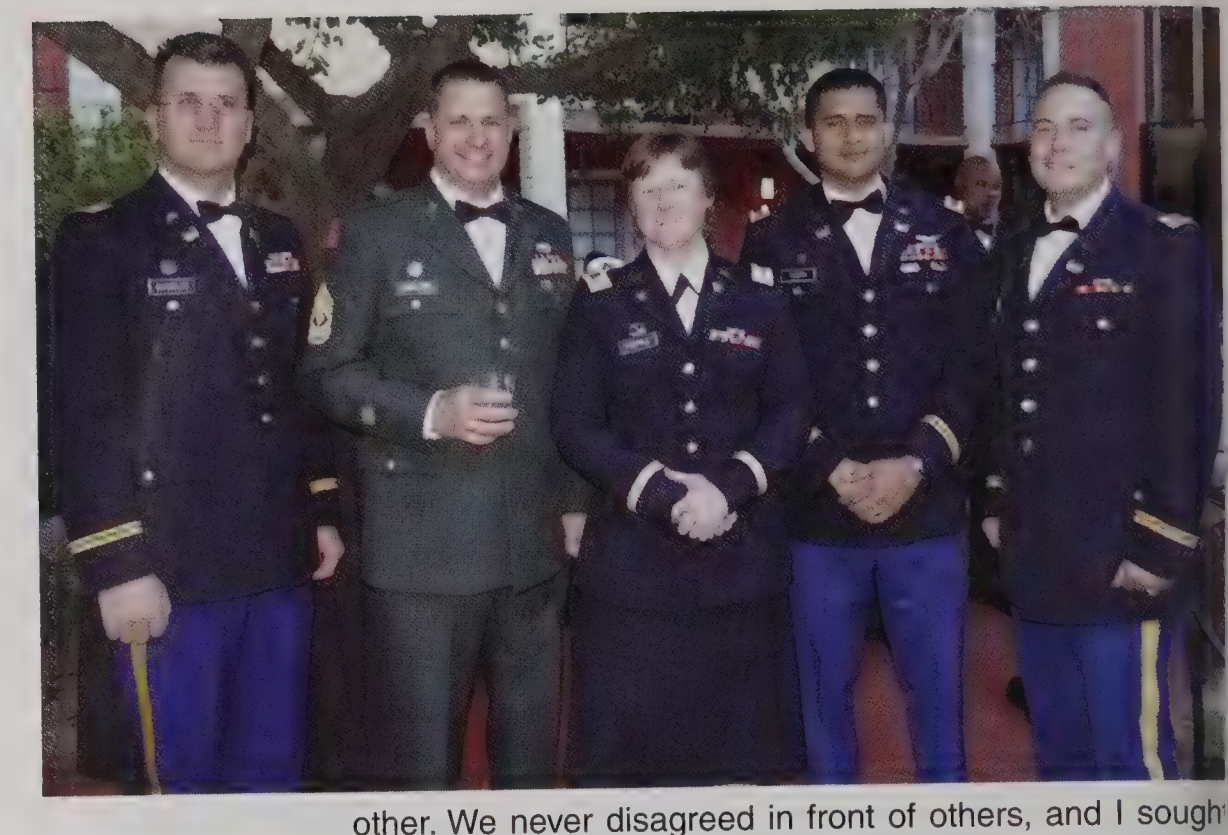
Jeremy Banta
1485th TC, OHARNG

When we deployed, both my 1SG and I had less than one year in our positions. We had a good working relationship prior to deployment, but we needed to discuss how we were going to operate once we got to the MOB site. I had already performed an initial counseling when she was hired. Most importantly at that time, I explained that NCO business was hers, officer business was mine. If she needed input, advice or my blessing on NCO issues, she



LTC Pete Kilmer

CPT Ryan Morgan (right) and 1SG Charles Judd (center) decorate their company area for the holidays in Iraq. 1SG Judd is currently the command sergeant major of the 1st Bn, 506th Infantry Regiment, in Afghanistan.



CPT Kathleen Sprinkle (center); her first sergeant, 1SG Richard Langston; and her lieutenants, (left to right) 1LT Scott Chandler, 2LT Juan Carlos Tabora and 1LT Ben Kartchner, enjoy a brigade dining-out.

was to seek it. I did the same for officer business if it might affect the NCOs. It gave her the autonomy to lead her NCOs and me to lead my officers. If I had an issue that was NCO business (for example, a Soldier out of uniform), I told her to address it rather than make the correction myself. If she had an issue with one of my officers, she did the same. This formed an excellent basis for our deployment.

Michael Konczey
A/3-8 CAV, 1 CD

For me, the key was threefold. The first was an early and thorough initial counseling with my 1SG. In that initial counseling, I laid out how I viewed our relationship and what my expectations were of him. It was great because it set the tone early. He also told me that despite having been a 1SG for 11 months prior to my taking command, it was the first time anyone had counseled him as a 1SG. The second part was setting goals together as a command team and reevaluating them periodically. The third part was maintaining open communication with each other and truly being a command team. The conditions and challenges you face as a command team change dramatically throughout your command tenure, but maintaining open and honest communications with your 1SG is essential to maintaining your sanity and completing your many diverse missions.

Fran Murphy
D/2-34 AR

For me, a dynamic CDR/1SG relationship started on day one. I published a Company Vision (that tied into my Leadership Philosophy) and gave 1SG an initial counseling that focused on my expectations of him. The counseling session rapidly became a conversation and a beneficial exchange of ideas. He told me that he was impressed that I took time to prepare and talk about an initial counseling with him. Afterward, we reprinted the Vision, signed both of our names to it and framed it outside the door to our company. I knew immediately that 1SG and I were on the same azimuth and prepared to succeed.

Kathleen Sprinkle
258th EN Co.

I took command after returning from Theater. My 1SG joined the unit shortly after that. As others have stated, the key was being together. We brought back the basics, including battle buddies, and that's what we were for each other. We never disagreed in front of others, and I sought his advice in all areas. He is a strong NCO, and I learned a great deal from him after our three years of command together. He, in turn, would be there for me, no matter what. I remember once being summoned to the battalion CDR's office. I told him I had to report, and he grabbed his hat. I told him he didn't have to go, but he said, "Ma'am, we get the praise together and we get the butt chewings together."

Through the CC forum, company commanders are connecting in conversation with each other and becoming more effective leaders as a result. If you are one of 10,000 CC forum members, please log on to http://cc.army.mil and join the conversation. If you are not a currently commissioned Army officer and wish to contribute to the conversation, send your thoughts to peter.kilner@us.army.mil, and we'll post them for you.



Soldier Armed

Counter Rockets, Artillery and Mortar (C-RAM)

By Scott R. Gourley

In the conduct of Operation Iraqi Freedom, insurgents continue to pose serious dangers by employing indirect-fire tactics of quick-attack, low-trajectory, urban-terrain-masked rocket, artillery and mortar (RAM) strikes against U.S. forward operating bases in Iraq. To combat this threat, the Army developed a counter rocket, artillery, mortar (C-RAM) capability—an integrated set of capabilities to provide warning and intercept of RAM threats. The primary mission of the C-RAM project is to develop, procure, field and maintain a capability that can detect RAM launches; warn the defended area with sufficient time for personnel to take cover; intercept rounds in flight, thus preventing damage to ground forces or facilities; and enhance response to and defeat of enemy forces.

—LTG Kevin T. Campbell, Commanding General, U.S. Army Space and Missile Defense Command, congressional testimony, April 2008

n his April 2008 testimony before the Senate Armed Services Subommittee on Strategic Forces, LTG evin T. Campbell highlighted one of ne great force protection success sto-es within the modern battlespace: -RAM.

As noted by LTG Campbell, C-RAM ddresses the indirect-fire threats of ockets, artillery and mortars. The difculties presented by these threats andate a "holistic approach" in any esulting force protection solution. hus C-RAM is built around seven upporting functional areas that adress the problem:

- Shape—knowing the threat forces, eir capabilities and patterns so that e Army can make the best use of its sources.
- Sense—knowing, in a timely man-r, that an attack is under way or otting a potential attack before it appens through the use of persistent urveillance.
- Warn—providing a timely and lolized notification so troops can take otective cover.
- Intercept—destroying the rounds flight.
- Respond—providing the necesry and timely information required troops can best decide how to react to the enemy action and with what resources.
- Protect—hardening structures or assets to provide physical protection when possible and practicable.
- Command and Control—providing the integration of all components into a robust, flexible, tailorable and scalable architecture.

In its critical role as lead systems integrator for C-RAM, the U.S. Army's Product Office (PO) C-RAM is tasked with the responsibility, across those functional areas, to rapidly develop, acquire, integrate, test, field and sustain C-RAM and unit/force protection system-of-systems hardware and software to various echelons for maneuver forces and at fixed or semi-fixed sites, in and outside the continental United States. Product Office C-RAM will provide echelons with a correlated air and ground picture, using existing DoD-fielded components where possible, linking them to the Army battle command system and the joint defense network via various forms of communications to provide situational awareness and the exchange of timely and accurate information to synchronize and optimize automated shape, sense, warn, intercept, respond and protect decisions.

As outlined by Product Office C-RAM representatives, the C-RAM capability development effort began in May 2004, upon direction from the Chief of Staff of the Army to find a solution to the indirect-fire threat.

U.S. Army Training and Doctrine Command (TRADOC) headquarters was given initial lead as the "combat developer," since the solution was likely to be a cross-branch/cross-service effort. Similarly, Program Executive Office for Command, Control and Communications-Tactical (PEO C3T) was given the materiel development lead.

Under this structure, the Air and Missile Defense Command and Control Systems (AMDCCS) Program Office presented a potential solution using existing field artillery radars integrated by existing Air Defense C2 and connected to a yet-to-be-determined interceptor. This approach was briefed to Army leadership and approved for further development and refinement.

In June 2004, a theater operational needs statement was approved for an indirect-fire intercept capability, which was validated by the Army staff; funding was provided to the AMDCCS Program Office for a proof-of-principle test to be conducted in late 2004.

The integration of sensors and C2 was accomplished and a lethal interceptor was selected for continued integration and capability development. Upon successful testing, which was observed by the U.S. Central Command commander and staff elements, the results and near-term capability plan was briefed to the Deputy Secretary of Defense in January 2005. Funding and direction was again provided to the AMDCCS Program Office to field an initial capability to theater and to continue a holistic approach to the problem.

Subsequent organizational changes



Counter rocket, artillery and mortar technology (C-RAM) integrates various capabilities that can detect, locate and combat indirect fire, and can be modified according to a unit's particular needs.

included the formation of a C-RAM/AMDCCS Program Directorate in October 2005, which has continued to develop and field holistic solutions that are now being considered the backbone of the larger Joint, integrated unit, base and installation protection effort.

Product Office C-RAM representatives note that the office is also looking at embedding portions of the C-RAM capability (primarily the sensor interfaces, C2 and warning) into the air defense airspace management cells within each brigade combat team.

Prime and significant subcontract industry participation to date has included: Northrop Grumman (Huntsville, Ala.; Carson, Calif.); Raytheon (Huntsville; Tucson, Ariz.; Louisville, Ky.); SCI (Huntsville); Cooper Industries (Sarasota, Fla.); General Dynamics (Taunton, Mass.); Syracuse Research (Syracuse, N.Y.); PKMM Inc. (Lacy, Wash.); L3 Communications (Mays Landing, N.J.); and ITT/CAS (Huntsville).

Product Office C-RAM representatives describe the program's current status as "an integrated set of capabilities that span the Department of Defense," identifying a land-based version of the Navy's phalanx weapon system as one representative component example and adding that the C-RAM systems, performing well and strongly supported in theater, are now being manned by Joint (Army/Navy) units.

C-RAM has "allowed the Army to achieve its 100th successful intercept of a rocket or mortar round fired at high-value Multi-National Corps-Iraq assets," noted one office spokesman. "This came just two years after its first intercept, during which it disabled an inbound mortar round to prevent damage to assets on the ground. Since its initial operational capability was declared more than three years ago, C-RAM has provided more than 1,500 localized warnings of incoming attacks, so troops can take protective cover and stay out of harm's way."

Near-term plans call for systems and integration maturation to "provide new and unique solutions to changes in the threat." Additional interceptors have also been ordered for delivery starting in fiscal year (FY) 2010.

In terms of funding, the current capability, now being referred to as indirect-fire protection capability (IFPC) Increment 0, has been developed, fielded and sustained via congressional supplemental funding. Congress has reportedly requested that C-RAM become a program of record (PoR). PoR efforts are under way and "IFPC Increment I" capabilities production document ("BCT sense and warn") is being staffed, with an Army requirements oversight council projected later in FY 2009.

An "IFPC Increment II" analysis of alternatives and associated "intercept-focused" capability development document is also being drafted at this time.

Service program participants emphasize that "C-RAM is about saving lives and protecting critical assets."

"We are all about force protection," observed one PO representative. "That is the heart of our C-RAM and air defense products and services. There are two critical by-products of this. First, we free our forces to maneuver and complete their missions and, second, we prevent our enemies from being able to do the same. In addition to enhancements in airspace management, we now have capabilities allowing us to detect incoming fire and intercept it before it results in casualties, saving the lives of our warfighters and protecting our vital assets. Our systems are making our Army more effective and more aware, and they provide a greater sense of information dominance on the battlefield."

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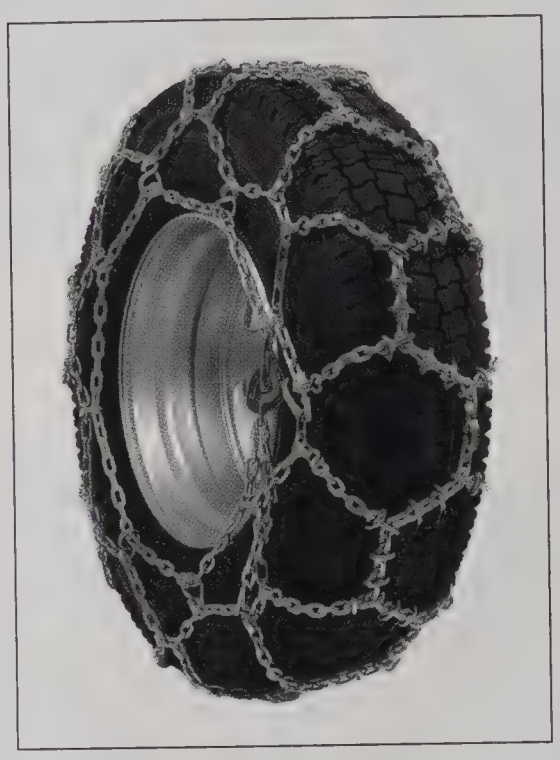
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AUSA Sustaining Member Profile

RUD Chain, Inc.

Corporate Structure—Founded: 1980. CEO: Joerg Rieger. Headquarters: 840 N. 20th Avenue, Hiawatha, IA 52233. Telephone: 319-294-0001. Web site: www.rudchain.com.

RUD Chain, Inc., a subsidiary of RUD Ketten Rieger & Dietz GmbH u. Co. KG, has been providing its customers with long-standing partnerships in the United States since 1980. RUD's ongoing commitment to its customers and technical innovation has earned the family-owned company its world-renowned reputation. RUD is ISO 9001 certified and practices the most stringent and unique testing procedures to ensure the production of the highest quality chain products in the industry. RUD's commitment to produce high-quality safety products makes it the ideal company to help meet the rigorous needs of the U.S. military.



RUD's production facility, located in Aalen, Germany, has been manufacturing high-quality round steel-link chains for lifting, lashing, conveying, tire protection, traction and off-road applications for more than 130 years. The RUD state-of-the-art production facility is regarded as one of the most modern chain-producing facilities in the world. The company's core competency is its expertise in heat treatment methods, which has secured its position as a leading manufacturer of high-quality round steel-link chains and associated components. Having stood the test of time, RUD has become a global player with approximately 1,100 employees and seven subsidiaries around the world.

The well-established brand name RUD stands for quality, innovation and know-how. Continuous research and development have enabled the company to produce products that not only meet the highest expectations but also consistent quality standards while remaining the innovator when it comes to tire protection and traction chains. RUD's highly engineered standard and its special solutions are what sets the company apart from other chain manufacturers. Its standard products and unique solutions are used in a number of military applications worldwide and continue to perform under the most extreme and challenging conditions. The defense industry and the U.S. military use the following RUD product lines.

Lifting and Lashing Points. To maximize safety without compromising strength, RUD produces 260 different types of highly tested lifting, lashing and tie-down products, including 200 products designed for bolting and 60 designed for welding. The company currently provides numerous weldable lifting and lashing points to several defense industry manufacturers. RUD also provides its customers with the necessary products needed to lift and lash any type of equipment, special load or vehicle.

Lifting Systems. RUD's custom lifting systems are designed to make the most complex lifting solutions safer and more efficient and provide the military with a single lifting system that is capable of performing numerous lifts on several different vehicles. RUD lifting systems are easily transported in existing military shelters and maintenance vehicles. Along with its continuous product testing and support, RUD offers technical and operator manuals for each system. These manuals support the everyday user with the information necessary to safely perform any lift, and they outline the requirements for annual inspections and periodic load testing.

Lashing Systems. RUD's standard and custom lashing systems and chains are designed for securing vehicles and handling supplies and equipment for land, sea and air transport. In addition to being the world innovator when it comes to designing safe, high-quality lashing systems, RUD boasts years of experience and the ability to solve any lashing challenge and design a solution to suit the customer's needs. RUD lashing chains provide the highest lashing capacity available with the lightest-weight chain assemblies on the market. This means that RUD chains are not only strong, but light and easy to use. Because RUD leads the industry in chain technology, there is no better chain product on the market for load securing in the course of training, humanitarian missions or war.

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RUD's mission statement is customer driven, and RUD's customers are the foundation for its success. RUD's longstanding customer partnership underscores its ongoing commitment to the highest quality products and customer safety.

Reviews

An Officer's Coming of Age

'he Unforgiving Minute: A Soldier's Education. *Craig M. Mullaney. The Penguin Press. 386 pages; map; black-and-white photographs; $28.95.*

By COL Cole C. Kingseed
U.S. Army retired

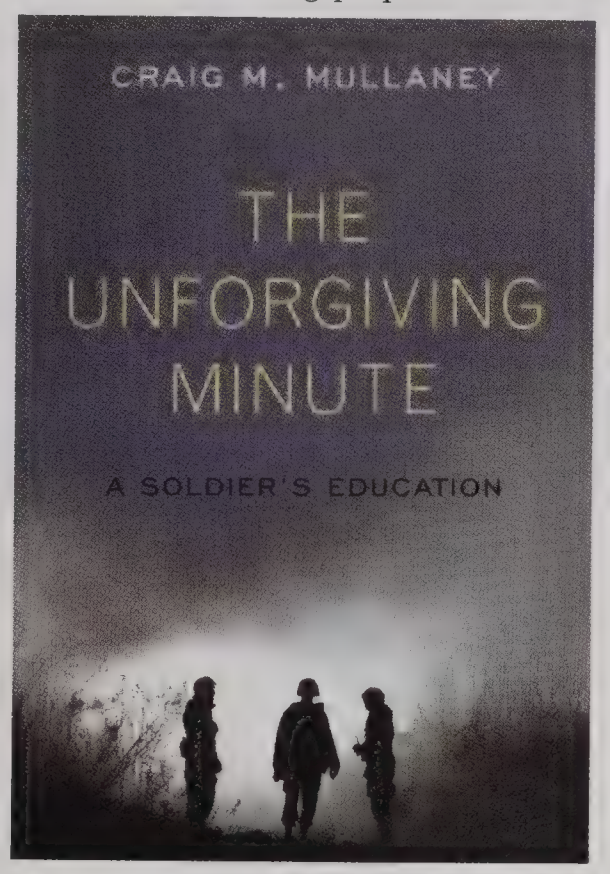
't is hardly surprising that after seven -years of war, a number of superb ombat memoirs have emerged from ie conflict in Afghanistan. One of the est is Craig Mullaney's *The Unforgiv-ig Minute.* Mullaney is a recent West oint graduate and a Rhodes Scholar 'ho deployed to Afghanistan as a pla-on leader in the 10th Mountain Divi-on. *The Unforgiving Minute* relates the urden that leaders bear in war and ie things war does to them.

When Mullaney initially decided to rite this memoir, he did so to preserve iemories that were slipping away and finish a war that, like most combat eterans, he had brought home with m. That purpose evolved into a far ore noble quest to "help America bet-r understand its military … inspire me to serve … and shed some light operations in Afghanistan that seem have been largely forgotten by the merican public." In a larger sense, *The nforgiving Minute* serves as an attempt settle some of the debt that Mullaney els he still owes his country.

Subtitled "A Soldier's Education," *ie Unforgiving Minute* could just as sily be called "The Coming of Age an Infantry Officer." Throughout e text, Mullaney quotes the likes of Scott Fitzgerald, William Shake-eare and Marcus Aurelius to drama-ze the critical incidents along his rsonal journey from West Point to ghanistan and back. The book's title extracted from Rudyard Kipling's em "If," illustrating Mullaney's vn evolution both as a combat com-ander and as a man.

Mullaney dedicates half his narrative to his days as a student, chronicling his life at West Point, his years studying at Oxford, and the trials and tribulations of a Ranger student with unflinching honesty and candor. If West Point "offered an almost religious quest for perfection" and taught Mullaney how to answer questions, Oxford taught him what to ask. Ranger school then provided the "Sparta to Oxford's Athens."

Mullaney's years at the U.S. Military Academy and as a Rhodes Scholar readied him for a career in military service, but nothing prepared him for



what he experienced when his unit deployed to Afghanistan. Titled "Soldier," this section of the book constitutes the heart of *The Unforgiving Minute.* Mullaney likens his deployment to a combat theater to Dante's descent into the inferno. Indeed, Mullaney's repeated references to Dante offer instructive insight into his maturation as a combat leader and as a person.

Mullaney's description of his first days in combat is eerily reminiscent of Pulitzer Prize-winning author Philip Caputo's narrative of the Vietnam War. In *A Rumor of War,* Caputo describes the anguish within a company of marines when they suffer their first fatality. Mullaney's "unforgiving minute" occurred when he received a radio transmission that one of his men, PFC Evan O'Neill, had been killed by a sniper while the platoon patrolled near Losano Ridge just miles from the Afghanistan-Pakistan border.

Mullaney's reaction to O'Neill's death and how he struggled to cope with the loss constitute the most gripping part of this narrative. Calling to mind how well he had fulfilled his part of the contract between a leader and the soldiers entrusted to his care—to never spend their lives cheaply—Mullaney initially questioned his own leadership abilities. Accompanying the nightmares and the personal grief that so troubled Mullaney was the stark realization that the burden of responsibility that a leader shoulders in combat is "the price of a salute."

After returning from Afghanistan, Mullaney served with The Old Guard and on the faculty of the U.S. Naval Academy in Annapolis, Md. During this period, he prepared himself to seek a "ghost's forgiveness."

Traveling to a cemetery in North Andover, Mass., Mullaney paid his final respects to Evan William O'Neill and sought O'Neill's forgiveness. Then, for the first time, he realized that something had changed. As he puts it, "Somewhere between Annapolis and Andover, I had finally forgiven myself." Life would go on. He had performed his duty admirably, as had O'Neill.

Seven years after his own graduation from West Point, Mullaney witnessed his brother's graduation from the Military Academy and Ranger school. The torch had been passed. Though Mullaney claims that ultimately he was not strong enough to continue serving in uniform and to meet the duties he had to his family, he could not be more

wrong. *The Unforgiving Minute* is a classic memoir of war and personal development. Craig Mullaney has provided a far greater service to his nation by penning a riveting memoir that should be mandatory reading by every junior officer who dons the military uniform.

COL ***Cole C. Kingseed****, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.*

Varied Fare

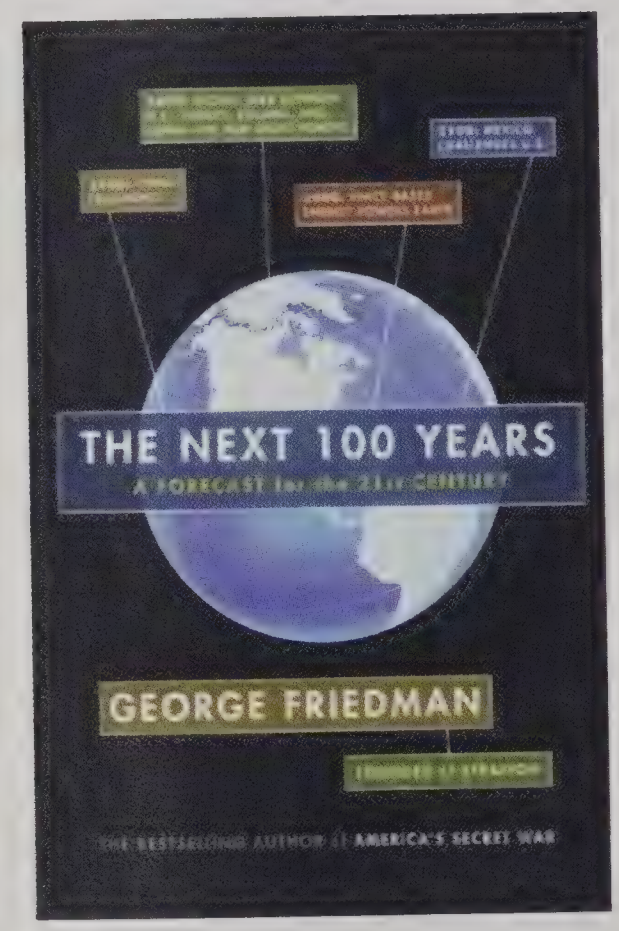
The Next 100 Years: A Forecast for the 21st Century. *George Friedman. Doubleday. 272 pages; $25.95.*

For a book that purports to tell the story of the upcoming 100 years, George Friedman's *The Next 100 Years: A Forecast for the 21st Century* reads like a decidedly old-fashioned book. Those who are not tracking the many threads futurists try to weave together to unveil the fabric of the future may find value in Friedman's introduction to a range of topics from demographic trends to energy research. Other than as a source of light entertainment, however, this volume does not have much to offer.

The Next 100 Years outlines a future history conceived from studying current economic, political, social and cultural trends. What is ahead, Friedman suggests, is a mixture of collapsing empires, titanic wars, breakneck resource competition and breathtaking technological advancements.

Friedman, a former political science professor at Dickinson College and the founder of STRATFOR, a private open-source intelligence company, argues he has a remarkable method for peering into the future that amounts to more than just guessing. He calls his method of analysis geopolitics. Sadly, that admission is hardly inspiring news. Predicting the future this way (combining the impact of geography, demographics, culture, economics, politics and technology to assess the future course of states) is nothing new. Friedman even acknowledges this when he discusses two of the granddaddies of looking at the world through a geopolitical perspective, British geographer Halford Mackinder and the American naval strategist and historian Alfred Thayer Mahan.

Recognizing that *The Next 100 Years* looks at the next century in the same manner as people looked at the last two might prompt the question: What makes Friedman's way of predicting things new and interesting? The answer: It is hard to tell. There is precious little in *The Next 100 Years* to suggest that the narrative is anything but Friedman's musings. There are no footnotes, no index, no bibliography and worst of all, no real discernible analytical method. This is remarkably disappointing, particularly from a CEO who runs a company that claims to do cut-



ting-edge analysis. Indeed, Friedman seems to have a lot more in common with the 19th-century futurists described in Antulio Echevarria's fascinating book, *Imagining Future War: The West's Technological Revolution and Visions of Wars to Come, 1880–1914.*

The lack of any real analytical framework is doubly disappointing given that there is so much potential to do really good future studies today, notably the proliferation of computer technology, the Internet and everything else that comes with the "information revolution." Researchers today have access to vast digital libraries and databases as well as powerful search and computational programs. New means of manipulating data, like informatics (the science of information processing); data mining (extracting and analyzing data to identify patterns and relationships); computer simulation (modeling a system); and open-source intelligence (acquiring and analyzing information from publicly available sources to produce actionable intelligence) are delivering revolutionary instruments of knowledge discovery.

With new knowledge there comes a number of forecasting techniques that hold remarkable promise. For example, one way to combat the tendency to plan against only the most anticipated end state is through an analytical approach often called scenario-based planning, in which analysts postulate alternative future conditions and determine the optimum response for each. This method was used effectively by the Pentagon and State Department interagency-led study group called Project Horizon.

Other innovative methods of forecasting involve studying and predicting the behavior of complex systems and networks. Most problems faced by policymakers today involve trying to understand, predict or affect the behavior of complex systems, from border and immigration security to financial markets to transnational terrorist organizations. Describing complex systems—how they work, what they produce—and then applying various planning methods and choice models to determine how the systems' performance can be changed is the task of complex systems analysis, which is merging with something called network science that examines how networks function. Network science studies diverse physical, informational, biological, cognitive and social networks searching for common principles, algorithms and tools that drive network behavior. The understanding of networks can be applied to a range of challenges from combating terrorist organizations to organizing disaster response.

Ironically, while the means of knowledge discovery have become more sophisticated, the process of public poli

ymaking has become increasingly in-uitive. In Washington, talking points, ;ut feeling, partisan preferences and deological fervor crowd out cutting-dge analysis. Friedman's book reads nore like he is joining the crowd than ucking the trend.

That's not to say there is nothing oteworthy or worthwhile in *The Next 00 Years*. For example, Friedman of-ers a refreshingly state-centric view f the future, a counterpoint to books ke Philip Bobbitt's *Terror and Consent*, hich predicts that the traditional na-on-state is about dead.

Friedman also has some interesting iews about the threats he believes will ll by the wayside, including Islamist-ased transnational terrorism and long-rm strategic competition with China Russia. His future threats are upstart oalitions of states that take on great owers.

To his credit, Friedman also empha-zes the potential for advancing merica's interests as well as battling ie challenges. He is right, for in-ance, to emphasize the importance of maritime power in the future world. Ironically, as information technology puts global commerce in high gear, the economy becomes increasingly dependent on one of the world's oldest forms of transport. Moving things by sea will remain one of the most economically viable and environmentally friendly means to move bulk goods around the planet.

In addition, *The Next 100 Years* is certainly spot-on in placing a great emphasis on space as a vital area of future competition. That, however, hardly requires a fortune teller. The modern world is already dependent on space for almost everything that makes the world modern, from predicting the weather to protecting against ballistic missile attack. Without access to space, life in America today would look an awful lot more like life in the 19th century than the 20th—and certainly the 21st.

Unless the United States does a lot more now to ensure access to the commons of space and protect American assets that are out there, future wars could include a free-for-all in outer space like the warring "Battle Stars" described in the closing chapters of *The Next 100 Years*. The fact that current U.S. plans for space are so lackluster and conservative compared to the stakes leaves little room for comfort.

—James Jay Carafano

Shadows in the Jungle: The Alamo Scouts Behind Japanese Lines in World War II. *Larry Alexander. NAL Caliber. 352 pages; index; black-and-white photographs; maps. $24.95.*

In *Shadows in the Jungle*, a tale that is always gripping if frequently gruesome, Larry Alexander, the author of *Biggest Brother*, recounts the service of the Alamo Scouts, a little-known group of soldiers handpicked and rigorously trained to gather intelligence behind enemy lines in the Pacific during World War II. Commanded by GEN Walter Krueger (who named the scouts in honor of the fort in his hometown of San Antonio, Texas), the Alamo Scouts conducted more than 100 known missions throughout 1944 and 1945, most

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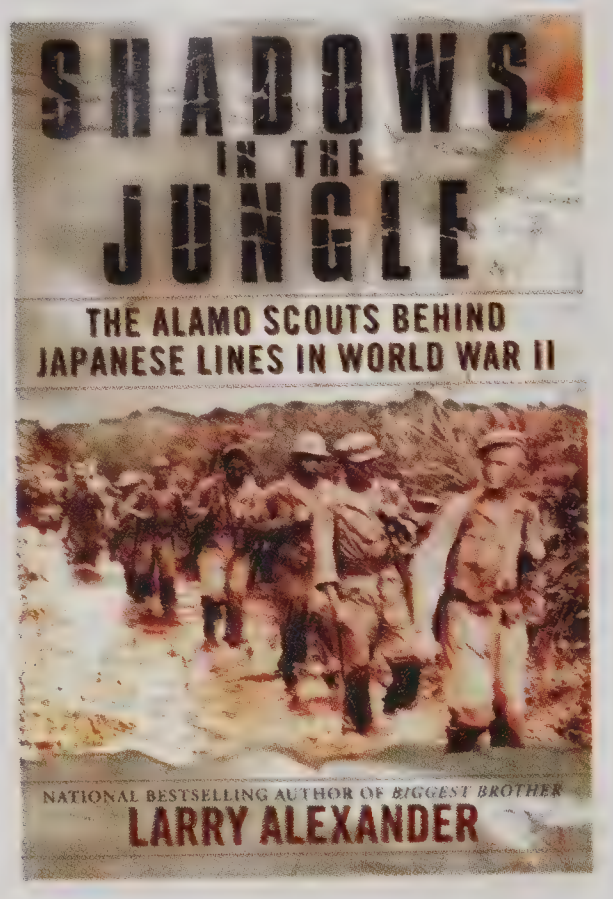
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with the intent of reconnoitering information that was passed through GEN Krueger to GEN Douglas A. MacArthur, the Supreme Commander of Allied Forces in the Southwest Pacific Area.

The elite teams of six to eight men also carried out several rescues of prisoners of war, including the rescue at Cape Oransbari in 1944, which merited



the first notice of the Scouts in the American press, and the more publicized 1945 rescue at Cabanatuan. The miraculously successful rescue at Los Banos, in February 1945, freed more than 2,100 internees—including a three-day-old baby born to a married couple in the camp—but was overshadowed stateside by the attention paid to the raising of the flag at Iwo Jima on the same day.

Most of the Alamo Scouts' operations were classified until the late 1980s.

Shadows in the Jungle provides a much-needed remedy to the relative obscurity of the feats of these soldiers. Employing a gritty, up-close style that gives the narrative the feel of a novel, Alexander combines, to great effect, personal testimonies of Scouts he interviewed with official accounts of their deeds. While the details of the teams' exploits are not often pretty, the telling rings true. As readers follow different Alamo teams around the southwest Pacific, they will find themselves rooting for these men as if they know them—not that the Scouts needed any help.

Perhaps the most awe-inspiring aspect of their story is that over the course of two years and many dangerous operations, none of the 138 Alamo Scouts who made it through training and was assigned to a Scout team was killed or captured in action. GEN Krueger was fiercely proud of this. After a successful intelligence operation on Manila, he said, "My Alamo Scouts always come back. I can send them anywhere … and know they'll accomplish their missions." All Americans can be proud of the Alamo Scouts; *Shadows in the Jungle* shows us exactly why.

—Sara Hov

Patton: Legendary World War II Commander. *Martin Blumenson and Kevin M. Hymel. Potomac Books. 160 pages; black-and-white photographs; index; clothbound $21.95, paperback $13.95.*

A new entry in Potomac Books' *Military Profiles* series traces the life of George S. Patton Jr. The series' purpose is to present biographies of "significant military figures from ancient times through the present," serving the casual reader as well as those with a professional interest and offering a basic treatment of the subject—a starting point from which further study can be pursued.

In their presentation and analysis of Patton, Kevin M. Hymel and the late Martin Blumenson succeed in fulfilling this objective.

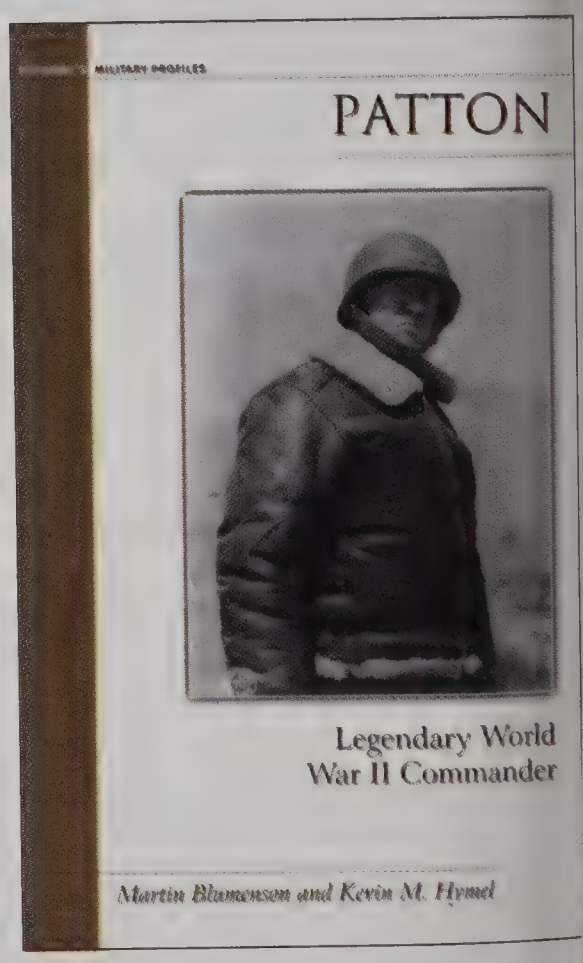
Before jumping into the story of *Patton: Legendary World War II Commander,* Blumenson and Hymel present a time line of Patton's personal and professional milestones. That almost every year from his commissioning in 1909 to his death in 1945 contains a milestone indicates Patton's dynamism, ambition and desire to be wherever the action was—and foreshadows the interesting narrative that follows.

The chapters in *Patton* proceed chronologically, the time periods defined militarily.

After a discussion of Patton's family and childhood, the chapters cover his military education at the Virginia Military Institute and West Point; his early military service in Mexico and World War I; the interwar period, in which he hungered for a chance to achieve glory in combat; his campaigns in North Africa and Sicily in World War II; his generalship in Normandy and long-awaited triumph in the Battle of the Bulge; and his difficulty in making the transition to postwar life before his untimely death.

Blumenson and Hymel sum up Patton's importance and legacy in a final chapter, acknowledging Patton's faults while praising his foresight and prowess on the battlefield and in the areas of technology and tactics—an influence still felt by the U.S. Army.

The amount of personal detail, particularly in the treatment of Patton's early life, will entertain the reader as well as provide an understanding of his motivation, from childhood, to become a great general. A family tree replete with war heroes, a boyhood spent listening to Civil War stories and a general interest in history all drove Patton



in his quest for military fame and success. In reading of Patton's frustrations at military school despite his best efforts and of his fears of unfulfilled potential in the years before World War II



Then-LTG George S. Patton Jr. discusses strategy with LTC Lyle Bernard, a prominent figure in the second daring amphibious landing behind enemy lines on Sicily's north coast in 1943.

readers may find themselves rooting for this man who, with single-mindedness of purpose, overcame many obstacles along the way to achieving what he always felt was his destiny. The reader is presented with Patton's flaws, both personal and professional. The authors conclude that despite Patton's flaws, "in the end, he … knew how to win."

And win he did. Patton showed an early flair for military maneuvers during the U.S. Army's 1916 expedition to Mexico to rout Pancho Villa; he led a skirmish that was the campaign's high point and the first motorized combat mission in U.S. Army history. During World War I, he was instrumental in incorporating the tank into the Army's repertoire and proved its worth on the battlefield. During World War II, his success in North Africa and Sicily led to his command of the Third U.S. Army, which he led across the Continent and to victory in the Battle of the Bulge. Always desiring to be at the front and in the thick of action, Patton drove his troops as far and as fast as his superiors would allow, often putting himself on the front lines with his men, staring death in the face. That a man who cheated death on the battlefield so many times should succumb in the end to a paralyzing car accident seems a cruel twist of fate.

The authors have condensed the story of Patton's life into a quick yet comprehensive read. While this new volume treads familiar ground for those already well versed in Patton's life story, it is perfect for the reader who is new to Patton or who is looking for an inspiring vignette on military leadership. *Patton* would benefit from the addition of maps, to clarify descriptions of battlefield maneuvers, but overall it is an entertaining and educational biography of "the most successful army commander in the Allied cause" in World War II.

—Tenley Wadsworth

AUSA 2009 Calendar of Events

Association of the United States Army
2009 Calendar of Events
All dates and locations are tentative and subject to change.

June 16–18	**AUSA's ILW Army Logistics Symposium & Exposition** Greater Richmond Convention Center Richmond, VA
July 21–24	**AUSA's ILW Army Medical Symposium & Exposition** Henry B. Gonzales Convention Center San Antonio, TX
September 8–11	**DSEi (USA Pavilion organized by AUSA)** ExCel London London, UK
October 5–7	**AUSA Annual Meeting & Exposition** Walter E. Washington Convention Center Washington, DC

Historically Speaking

Thoughts on Memorial Day

By BG John S. Brown
U.S. Army retired

We Americans have an uneven record with respect to honoring our fallen soldiers. Occasionally in our history, anti-military or "unmilitary" sentiment has been at play, but more often there has simply been a lack of personal connection between busy citizens and those whose sacrifices have allowed them to prosper. Public policy has variously reinforced or arrested this trend.

Through most of our first century as a nation, combat deaths per se represented a tiny fraction of a dramatically expanding population. Ubiquitous frontier violence made dying in combat somewhat less unusual, and wartime losses to disease dwarfed losses on the battlefield itself. Death by disease was not confined to soldiers, of course. Life expectancy in general was short, and death intimately familiar to most. In this context, combat dead were mourned, to be sure, but generally by family, friends and members of the local community, and not often in a manner that particularly distinguished them from those who died for other reasons. The Revolutionary War was by far the bloodiest of the era. In it, somewhat fewer than one in 300 Americans died in combat. Within a generation, the population of the United States tripled, rendering personal connections with the fallen ever more tenuous.

The Civil War changed the paradigm. By that time, relatively few Americans lived amid frontier violence, and advances with respect to nutrition and sanitation were extending life expectancies. This declining mortality was dramatically reversed when a nation of a little more than 31 million people lost 625,000 soldiers at a rate of 600 a day. Few Americans were without a personal connection to a fallen soldier, and even fewer without a connection to the wounded or maimed. Memorial observances sprang up across the nation as communities coped with their grief and loss. A network of national cemeteries—now numbering 142, of which 128 are administered by the Department of Veterans Affairs—evolved. In 1868, GEN John A. Logan, commander in chief of the Grand Army of the Republic, the preeminent veterans' organization of the time, formalized the sentiment nationwide by inaugurating an annual "Decoration Day" on May 30 of that year. Over time, the name Memorial Day supplanted Decoration Day, and by 1890 its observance was accepted as May 30 in all the former Union states. Former Confederate states memorialized their Civil War dead on a different date until World War I, when Memorial Day was redefined to honor the fallen in all American wars and was universally accepted.

Memory of the Civil War was pervasive enough to survive in personal memories through World War I, a brief but dramatic conflict for the United States wherein it put more than three million into uniform and lost almost 300 a day. Moved by the sacrifice, in 1923 Congress established the American Battle Monuments Commission to commemorate the service, achievement and sacrifice of U.S. armed forces where they had served overseas. The first commissioner, General of the Armies John J. Pershing, resolved that "time will not dim the glory of their deeds." This mandate expanded enormously during World War II, wherein 16 million went into uniform and more than 400,000 died. Although per capita losses were a fraction of those in the Civil War, the pervasiveness of the mobilization guaranteed that virtually every American had a personal connection with sacrifice, if not necessarily death. The Cold War draft and the Korean and Vietnam Wars sustained this connection somewhat, although per capita losses in these later wars were an order of magnitude less.

The national commitment to memorialization advanced considerably with the assignment of the Third Infantry Regiment (The Old Guard) to duties at Fort Myer, Va., in 1948. It would continuously guard the Tomb of the Unknowns and directly support the burial of veterans in Arlington National Cemetery and the National Capital Region. It would also direct the most cathartic single act of memorialization in our time, the burial of President John F. Kennedy.

All who can remember November 22, 1963, remember



Soldiers carry the flag down the streets of Washington, D.C., on May 30, 1917, in commemoration of Decoration Day, now called Memorial Day.

vhere they were and what they were loing when they first heard that the 'resident had been shot. Much came ogether at his funeral. He was a World Var II hero when the generation that ought World War II was still in its rime. He was the Commander in Chief who brought the country safely ast the brink of Armageddon. He was ne visionary who dared to seek a na-onal renewal others only dreamed of. He was the leader whose entourage vas so inspiring we called it Camelot. Unprecedented public interest fol-owed every detail of putting him to est. After action comments from veter-ns of The Old Guard capture not only rief and sense of purpose, but also the myriad details involved in "doing it ght." Detailed guidance coordinating ore than three dozen moving parts, owd control for hundreds of thousands, media access in a levision age and scores of other issues was promulgated, hearsed and acted upon within a few days. The world atched, transfixed, and much of it grieved.

If President Kennedy's funeral marked a high point with spect to memorialization, the nation came off of it rather uickly. The Vietnam War polarized the nation and surfaced ntimilitary sentiments more virulent than traditional un-ilitary mind-sets. In 1968, Congress, largely for commer-al convenience, floated Memorial Day and several other olidays to create more three-day weekends. The end of the raft narrowed exposure to military service—and sacrifice. perations Desert Storm, Enduring Freedom and Iraqi Free-om were fought by one in 1,000 Americans. Memorial Day uickly evolved to be the unofficial beginning of summer, occasion for fiercely advertised sales and an opportunity r picnics, more than a day of remembrance. The American ttle Monuments Commission noted that cemetery visitors pressed increasingly little familiarity with the sacrifices of e fallen as World War II veterans among them became er fewer.

Other than the relatively few who are truly antimilitary, most Americans who are oblivious to Memorial Day's igins achieve that condition through lack of connection ther than hostility. To their credit, congressional and other aders have attempted to reverse the trend. In 2000, Con-ess inaugurated a national moment of remembrance as-



The White House Photographs Gallery

Members of The Old Guard bear President John F. Kennedy's casket to the gravesite for burial on November 25, 1963.

sociated with Memorial Day. In increasing numbers, communities set flags on the graves of veterans that day. The participation of the National Guard and Army Reserve in operations overseas connects local communities with their service and sacrifice. The Department of Defense has institutionalized support to veterans' funerals, and the Department of Veterans Affairs has further promulgated entitlements in that regard. Congress has supported educational aspects of the American Battle Monuments Commission's mission. Several programs put veterans and retirees into the classroom, where they can partially redress deficiencies, teaching history in general and military history in particular. Supporters of various national service alternatives evoke the memory of those who have served before. These initiatives are in the right direction, but can and should be expanded and improved upon. The fact that ever fewer Americans per capita are called to military service is a good thing, an indication of successful security policies pursued by a peace-loving people. It does not follow, however, that Americans should remain oblivious to sacrifices made on their behalf by their soldiers, sailors, airmen and marines. This shortcoming deserves further attention. ★

Recommended Reading:

Faust, Drew Gilpin, *This Republic of Suffering: Death and the American Civil War* (New York: Alfred A. Knopf, 2008)

Frost, Helen, *Memorial Day* (Mankato, Minn.: Pebble Books, 2000)

Reid, Thomas F., "Personal Memoirs of the State Funeral of President John F. Kennedy, November 22–25, Written by Those Who Were There." Online posting, December 4, 2008. http://www.freerepublic.com/focus/f=news/2143214/posts

*G **John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University.*



Photographs: Paul Avallone

"THE THINGS THEY CARRIED." Makeshift memorials—dogtags, rifles, helmets and boots of the fallen—provide emotional tribute to the men and women who died in service to their country. These images from Afghanistan in 2008 underscore the ultimate meaning of Memorial Day to Americans around the world.



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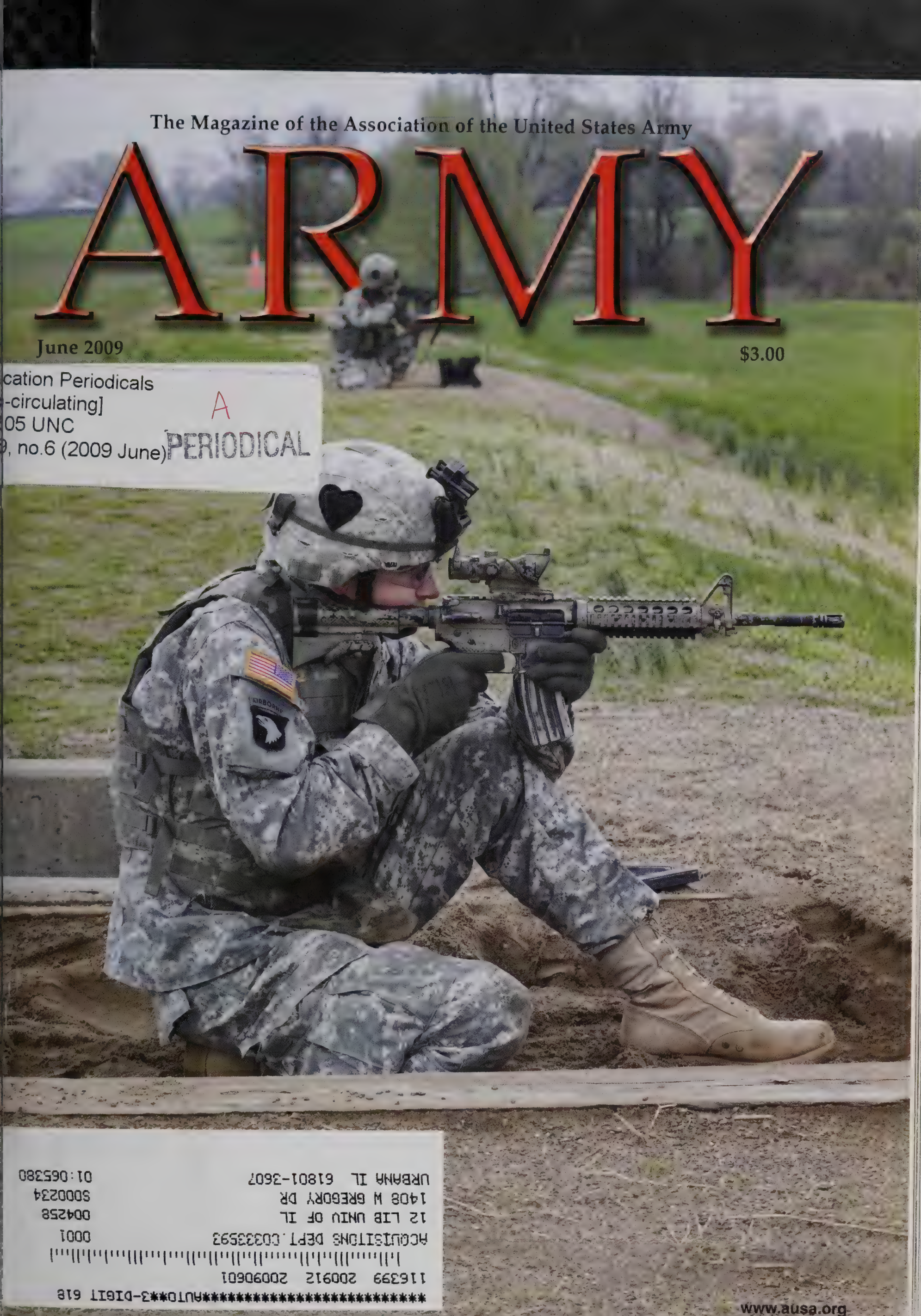
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ARMY MAGAZINE

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Year of the NCO—Building Blocks of NCO Leadership Development
Photographs by Dennis Steele
The Army's routinely held competitions such as the Expert Infantryman Badge qualification test are fundamental in developing noncommissioned officers at the unit level. ***Page 56***

Tal Afar 2005: Laying the Counterinsurgency Groundwork *By MAJ Jay B. Baker*
The battle for the ancient city of Tal Afar from summer 2005 to winter 2006, led by COL H.R. McMaster and the 3rd Armored Cavalry Regiment, was the first successful counterinsurgency campaign for U.S. forces in Operation Iraqi Freedom and helped shape how the Army has fought subsequent battles. ***Page 61***



Year of the NCO—Producing Professionals: The NCO Academy Revamped
Text and Photographs by Dennis Steele
Curriculum changes at the U.S. Army Noncommissioned Officer Academy, Fort Knox, Ky., have expanded NCO participation in staff and command functions, broadened NCO perspectives and prepared participants to be as adaptive as necessary. ***Page 70***

CompanyCommand—Building Combat-Ready Teams: Sharing What We Learn
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Letters

Posse Comitatus

■ In his May "Front & Center" article, "Resurrecting *Posse Comitatus* in the Post-9/11 World," COL Craig Trebilcock omits some highly pertinent history in his discussion of the Posse Comitatus Act. He sanctifies the act as a bulwark against the possible imposition of a federal regime that would trample civil rights. In fact, passage of the act in 1878 made it possible for the recently freed slaves of the former Confederacy and their descendants to be deprived of their civil rights for the next 90 years.

The act was the outgrowth of the presidential election of 1876, in which Democrat Samuel Tilden of New York defeated Ohio Republican Rutherford Hayes, 184 electoral votes to 165. Twenty electoral votes were in dispute. The states of the former Confederacy agreed to concede Hayes those 20 votes if federal troops were withdrawn from the South and Reconstruction were ended. Hayes became President, and to ensure that federal troops would not have power in the future to enforce civil law, such as voting rights, the Posse Comitatus Act was passed and signed into law. The result was an African-American popu-

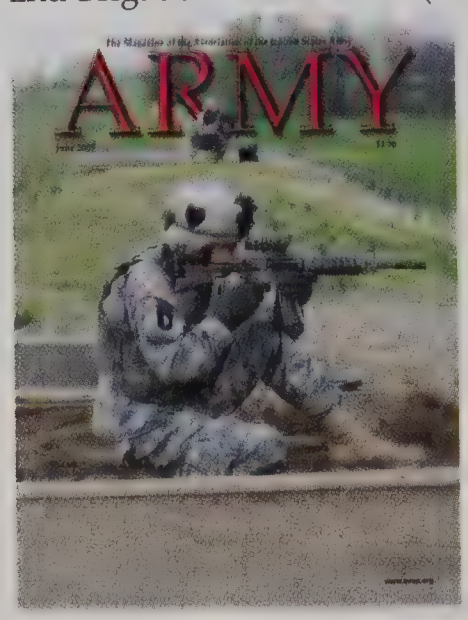
lation of millions of people with n protection from night riders, lynch ings and Jim Crow segregation, an with almost no access to a ballot box.

COL Trebilcock also denigrates th proven capabilities of the Regula Army to act in furtherance of the rul of law and in the protection of civ rights. The actions of the Regula Army at Little Rock, Ark., in 1957 an at Oxford, Miss., in 1962 made it clea that the right of African-Americans t a public education would be pro tected by the armed might of the cen tral government if such action wer necessary. On the other hand, som state governors were not above usin the National Guard to defy Suprem Court decisions.

I also have to disagree with COL Tr bilcock's choice of the National Guar as the invariably superior choice to th Regular Army as a civil law-enforc ment force. Without taking anythir away from the outstanding comb record of the National Guard in our n tion's wars and peacekeeping efforts most recently in the Balkans, Iraq ar Afghanistan—there also was a perio of time when the Guard's record keeping civil order was more than a l tle problematical. Of course the killin

This Month's Cover

SPC Christopher Rowlands shoots in the marksmanship phase of the 2nd Brigade Combat Team (502nd Infantry Regiment), 101st Airborne Division (Air Assault) soldier and noncommissioned officer of the quarter competition at Fort Campbell, Ky. Competitors were scored in several soldier skill categories and by a board of command sergeants major from the brigade. Soldier and NCO of the quarter and year competitions serve as important noncommissioned officer leader-development tools and are held at all unit levels, feeding upward to the major command level and to the annual Army Soldier and NCO of the Year competitions.



(Cover photograph by Dennis Steele)

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited for reasons of style, accuracy or space limitations. Letters should be exclusive to ARMY Magazine. All letters must include the writer's full name, address and daytime telephone number. The volume of letters we receive makes individual acknowledgment impossible. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via e-mail to armymag@ausa.org.

Kent State come to mind, and then ere were also events such as the Deoit riot of 1967. Regular Army Airorne units were dispatched to Detroit hen it became obvious that the Naonal Guard troops needed help. Of e 12 people shot and killed by troops, nly one was shot by a federal soldier. ne actions of the National Guard troops were later called into question. The people of Detroit cheered the presence of the Airborne in the streets—it's all in the record.

I know something about the enforcement of civil law. Thirty years ago, I had the privilege of being chief of police of Savannah, Ga. I had combat veterans of three wars in the ranks of the police department. Silver Stars, Purple Hearts and Combat Infantryman Badges were noted in the records of many of my police officers. To a man, they were among my best. They could handle the stresses, demands and dangers that the police world imposes on the keeper of order and peace. COL Trebilcock's stated fear that a young infantry veteran would act inappropriately in a civil law-enforcement environment was perhaps stated with the best of intentions. He need not fear: The well-trained and well-led American soldier can do anything.

COL DAVID G. EPSTEIN, PH.D.,
AUS RET.
San Diego, Calif.

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Washington Report

Supplemental Budget Request Tops $83 Billion

President Obama has asked Congress for $83.4 billion to fund the wars in Afghanistan and Iraq through the end of September. In his April request letter to the Speaker of the House of Representatives, the President said that nearly 95 percent of the funds—about $76 billion—will support U.S. military operations in Iraq, Afghanistan and Pakistan. Most of the rest will fund State Department operations, including diplomatic programs and development aid.

In late April testimony before the Senate Appropriations Committee, Secretary of Defense Robert M. Gates broke down the request. About $38 billion will cover the cost of maintaining forces in Iraq and Afghanistan. Another $11.6 billion will cover replacing and repairing equipment used in the wars. Finally, $9.8 billion will fund force protection, including the mine-resistant, ambush-protected vehicle program; body armor; aircraft survivability equipment; unmanned aircraft systems; and mine-clearing equipment.

In his request for the funding, the President said, "This is the last planned war supplemental. Since September 2001, the Congress has passed 17 separate emergency funding bills totaling $822.1 billion for the wars. ... The American people deserve an honest accounting of the cost of our involvement in our ongoing military operations."

Secretary Gates also emphasized that this is the last supplemental request. "Future budgets—starting with [fiscal year] 2010—will instead be presented together, with money for overseas contingency operations clearly marked as such," he told the Senate committee. Both the President and the Secretary urged swift passage of the bill to ensure that DoD has funds for continued operations.

New Security Force Assistance Manual. Headquarters, Department of the Army recently released Field Manual (FM) 3-07.1 *Security Force Assistance,* which institutionalizes the Army's years of experience in building partner security forces. As challenges to security increase, security force assistance, which requires versatility and skill in building relationships, has become a core competency of the Army.

Part of the broader mission of stability operations, security force assistance occurs under a variety of conditions that determine how and with which organizations the mission will be accomplished. The Army has military-cooperation agreements with more than 125 nations throughout the world. Under conditions of active conflict in which the United States is directly responsible for security, tactical commanders direct the security force assistance mission using the resources of modular brigades.

FM 3-07.1 will be available in hard copy early this month and is available online at http://usacac.army.mil/cac2/digitalpublications.asp.

Electronic Records for Veterans. President Obama announced plans in April to create a joint virtual lifetime electronic record that will streamline the flow of medical records between the Pentagon and the Department of Veterans Affairs (VA). Accompanied by Secretary of Defense Robert M. Gates and Secretary of Veterans Affairs GEN Eric K. Shinseki, U.S. Army retired, the President described the initiative to an audience of wounded warriors, veterans and veterans service organization leaders in Washington, D.C.

"When a member of the Armed Forces separates from the military, he or she will no longer have to walk paperwork from a DoD duty station to a local VA health center," the President announced. "Their electronic records will transition along with them and remain with them forever." The military and VA hospital systems now use different software, but the President has asked them to work together to define and build a seamless system. The goal is an electronic record that will contain a servicemember's administrative and health-care information from the day of enlistment, throughout the military career, to the day of death.

When the virtual lifetime electronic record system launches, GEN Shinseki said, it is important that all veterans be enrolled in the VA medical system. Whether an inc



In Celebration. *Sixty Army Reserve soldiers recently celebrated the Army Reserve's 101st birthday at a special reenlistment ceremony in Washington, D.C. Joining the men and women representing all 50 states as well as Puerto Rico, Guam and American Samoa is Secretary of the Army Pete Geren.*

idual stays in the service for two years or 20, the record ıould be complete and transferable. Mandatory enroll- ıent in the VA health-care system is important to the ıove to a joint electronic record because access to VA ealth care is currently restricted. Veterans in Priority roup 8, who lack service-connected conditions and have ıcomes above government-established thresholds, have ɛen unable to enroll in the VA health-care system. By July, ıcome thresholds will be raised to allow some 266,000 ɛw enrollments; the Obama administration plans to dou- .e that figure by 2013.

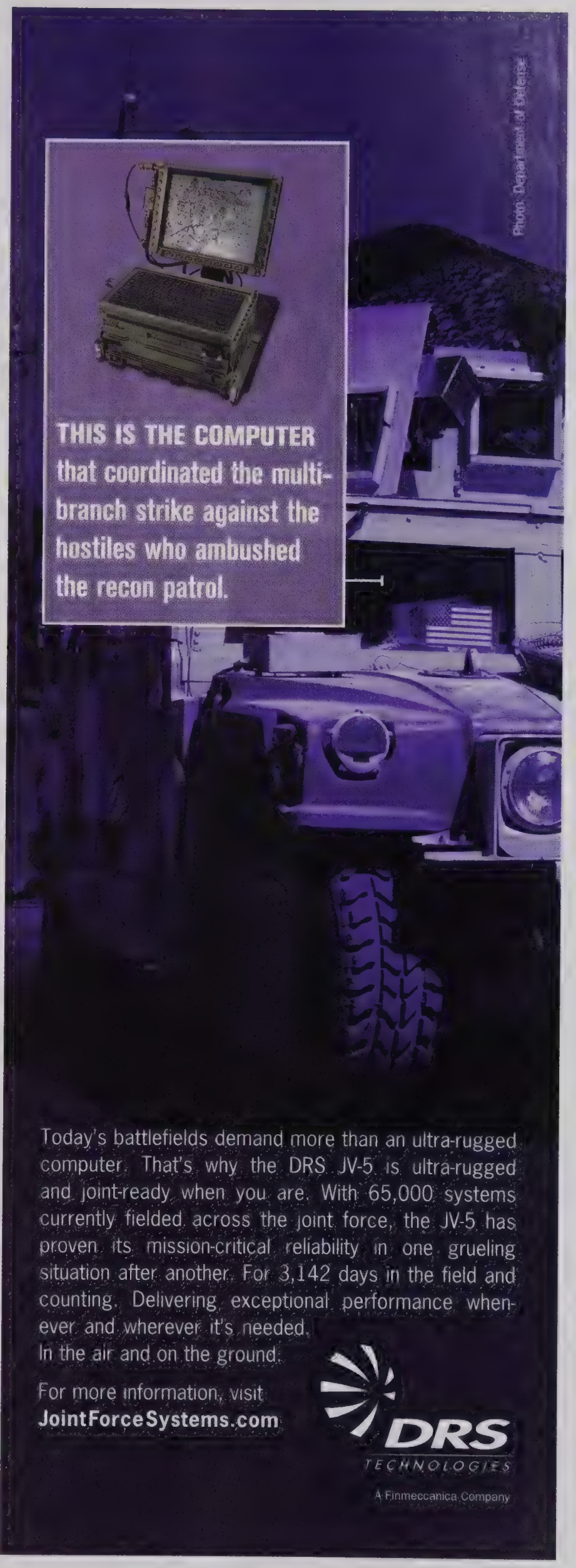
President Obama's announcement was part of an effort, ɛ said, "to give our veterans a 21st-century VA." His 2010 ıdget, he noted, includes the largest single-year increase VA funding in 30 years, and he plans to increase funding ɣ $25 billion over the next five years.

ɔst-9/11 GI Bill Applications Available. On May 1, the epartment of Veterans Affairs (VA) began processing ap- ıications for Post-9/11 GI Bill benefits. The VA will process ayments beginning August 1. The application form is ɣailable online at www.gibill.va.gov. The Post-9/11 GI Bill ɾovides broader educational benefits than the Mont- ɔmery GI Bill and includes a provision that allows en- llees to transfer their benefits to their spouses or children. etails concerning transferability are not yet available.

rmy Reportedly Losing JCA. *The Hill* newspaper has re- ɔrted, and multiple sources have acknowledged the in- rmation, that Army funding for the small fixed-wing int Cargo Aircraft (JCA)—the C-27J Spartan—has been ripped from the proposed fiscal year 2010 defense bud- t. Secretary of Defense Robert M. Gates did not address e JCA in his April press conference on the budget, and ose who worked on the budget had signed agreements ɔt to comment until it is released in detail.

The Army had previously been named executive agent r the program to replace the old and slow fixed-wing 23- erpa with the small C-27J, which would ferry cargo into ttlefields and ship goods to local U.S. communities dur- g emergencies and natural disasters. Reports are that in- ead of purchasing 78 or more of the planes, DoD could d up buying only 38, which the Air Force would retain. ıe Army National Guard was slated to receive 40 of the As, many of them going to districts at risk of losing Na- ɔnal Guard missions because of changes mandated by the 05 Defense Base Closure and Realignment Commission.

Following an open hearing on Army aviation in late April, any members of the House Armed Services Air/Land Sub- mmittee expressed their discontent with such a decision. ɔre than a dozen lawmakers signed a letter to Secretary ıtes in May asking him to retain the Army's cargo aircraft. e issue could ignite intense debate on Capitol Hill and ɔve state officials to initiate a lobbying campaign. Gover- rs and their adjutants general have previously warned that National Guard's ability to respond to domestic emer- ncies would be severely impaired without the aircraft.



2009 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its fourteenth ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2008.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints, color prints or color slides. Photographs must not be tinted or altered. (Send digital photos to jdow@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The smallest format for slides is 35mm, and slides must be in plastic or paper mounts.
7. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, Social Security number (for identification and tax purposes), address and telephone number, and caption information.
8. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
9. Entries must be postmarked by June 30, 2009. Letters notifying the winners will be mailed in September.
10. Entries will not be returned.
11. Employees of AUSA and their family members are not eligible.
12. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
13. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jeremy Dow (jdow@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.

leserve Partners with DHS. In April, U.S. Customs and order Protection, a division of the Department of Home- ınd Security, became the first federal entity to join nearly 00 civilian employers in the Army Reserve's Employer artnership Initiative (EPI). The collaborative project, es- ıblished in April 2008, aims at making it easier for civilian ɔmpanies to hire Army Reserve soldiers and to assist sol- iers in finding jobs in the public and private sectors.

The Army Reserve has approximately 10,000 soldiers ained in law enforcement, nearly one-quarter of the rmy's total military police force. U.S. Customs and Bor- er Protection expects to hire 11,000 this year, for jobs ınging from frontline border patrol agent to agriculture fficer and air interdiction pilot.

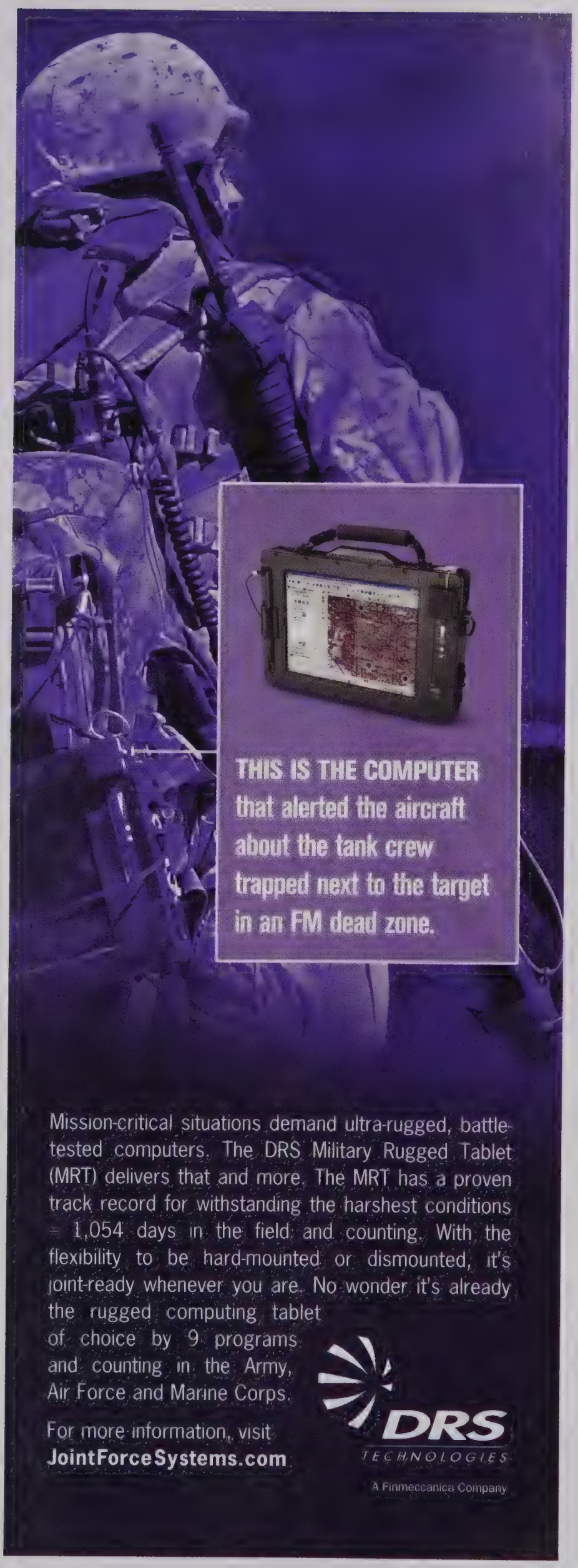
The Army Reserve has taken preliminary steps toward stablishing a partnership with the Federal Aviation Ad- ıinistration, which is in need of air traffic controllers, and considering engaging the Federal Bureau of Investiga- ɔn in the EPI program. Army Reserve leadership and in- ustry leaders met for two days at the Pentagon in April uring an Employer Partnership Initiative CEO Confer- ıce to discuss how to enhance the initiative.

rmy Networks Online. The Online and Social Media Di- sion of Army Public Affairs, formed in January, launched ı "Army Live" blog (armylive.dodlive.mil) and a fan ıge on Facebook in April as part of a new mission—social etworking. The goal is to foster informal conversation nong people inside and outside the Army.

At a "meet-and-greet" at the Pentagon in April follow- g the Facebook launch, deputy chief of Army Public Af- irs BG Jeffrey Phillips told invited military bloggers that, ven the new pace of electronic communication, social edia efforts must "utilize all means available to reach the rmy family and the American people." The Facebook ıge features podcasts, photos and links to Army-related eb sites, and asks viewers to weigh in on various topics. May 1, the blog had more than 8,000 fans.

Security restrictions require that soldiers write blogs ıly with the knowledge of their superiors; soldiers in Iraq ıd Afghanistan are often barred from accessing social- tworking sites on computer networks at military bases.

ɔins to Support CGSC. Lawmakers in the House and Sen- e introduced the 5-Star Commemorative Coin Act in Febru- y, which would authorize the Secretary of the Treasury to int commemorative coins to honor the heritage and contri- itions of the U.S. Army Command and General Staff Col- ge (CGSC) at Fort Leavenworth, Kan. The CGSC Founda- n would use proceeds from the sale of the five-dollar, e-dollar and half-dollar coins to fund programs and pro- ɔte excellence among the faculty and students of CGSC. nong the numerous outstanding military officers who ve served and studied at CGSC are America's five-star nerals George C. Marshall, Douglas MacArthur, Dwight D. senhower, Henry (Hap) Arnold and Omar N. Bradley. Vis- www.cgscfoundation.org/coinbill for more information.



News Call

Gates Requests McKiernan Resignation, Recommends LTG McChrystal As Top U.S. Commander in Afghanistan

With some 20,000 U.S. troops headed to Afghanistan this summer, Defense Secretary Robert M. Gates requested in May the resignation of GEN David D. McKiernan, commander, International Security Assistance Force (ISAF), Afghanistan. Secretary Gates recommended that LTG Stanley A. McChrystal be nominated for the position of top U.S. commander in Afghanistan.

Accompanied by Chairman of the Joint Chiefs of Staff ADM Mike Mullen, Secretary Gates announced at a Pentagon news conference that the mission in Afghanistan "required new thinking and new approaches by our military leaders ... We have a new strategy, a new mission and a new ambassador. I believe that new military leadership is also needed."

LTG McChrystal, director of the Joint Staff since August 2008, commanded Joint Special Operations Command from 2003 to 2008. Secretary Gates said that GEN McKiernan would remain in his present command position until the Senate confirms a replacement.



(Right to left) U.S. Army SSG Lech Szczawinski and SPCs Berchell Francis and Timothy Donovan clean a 120 mm mortar system at Forward Operating Base Lagman, Afghanistan, in April. The soldiers are assigned to Company B, 1st Battalion, 4th Infantry Regiment, U.S. Army Europe.

Most of the additional incoming U.S. forces will be posted to southern Afghanistan to pressure Taliban mil tants and help with governance an humanitarian operations. In a Pentago videoconference briefing, MG Mich ael Tucker, deputy chief of staff fo operations, ISAF, Afghanistan, sai "We're at a stalemate. We just simpl do not have enough forces to addre the needs of the people down there set the conditions for governance take hold."

The 5th Stryker Brigade Comb Team, 2nd Infantry Division, from Fo Lewis, Wash., will deploy in Kandah Province, in the eastern and northe regions. MG Tucker noted that U. commanders will be able to condu better interdiction operations in sout ern Kandahar and southern Helma Provinces. He also pointed out that t United States has stepped up its cou ternarcotics activities in an attempt put pressure on the Taliban.

Troops Remissioned to Afghanistan.

The 154th Transportation Company from Fort Hood, Texas, was moved from Iraq to Afghanistan in mid-April, the second 3rd Sustainment Command (Expeditionary) unit to make the direct move recently. Stationed at Camp Liberty, Baghdad, since January, the unit was repositioned to southern Afghanistan, where it will continue to transport supplies to Coalition forces.

The 4th Engineer Battalion, based at Fort Carson, Colo., arrived in Iraq in late February, its mission to clear roads in Baghdad of bombs and debris. By mid-April the battalion had begun shipping troops and equipment to southern Afghanistan, where it will finish its 12-month deployment.

"We are probably going to be the beginning of the influx you are going to see to Afghanistan," said LTC Kevin Landers, commander of the unit of nearly 500 combat engineers. It was the largest transfer of personnel and equipment from Iraq thus far.

The shifting of the units directly from Iraq to Afghanistan reflects President Obama's orders to deploy additional troops to combat the growing insurgency there.

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Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from April 1 to April 30, 2009. All names have been released through the Department of Defense; families have been notified.

SPC Michael J. Anaya, 23
SGT Daniel J. Beard, 24
CPL Brad A. Davis, 21
SGT Edward W. Forrest Jr., 25
PVT Bryce E. Gautier, 22
SSG Bryan E. Hall, 32
SPC Israel Candelaria Mejias, 28
SGT Raul Moncada, 29
CSM Benjamin Moore Jr., 43
CPL Jason G. Pautsch, 20
SGT Devin C. Poche, 25
SGT Leroy O. Webster, 28
SSG Gary L. Woods Jr., 24

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from April 1 to April 30, 2009. All names have been released through the Department of Defense; families have been notified.

CPL Francisco X. Aguila, 35
PFC Richard A. Dewater, 21
SPC Adam M. Kuligowski, 21

Upsurge in Violence in Iraq. A series of April bombings in Iraq has raised concerns that insurgents are trying to incite sectarian violence that would derail security gains made over the last year.

Twice as many U.S. soldiers died in April as were killed in March.

Five soldiers from the 2nd Brigade Combat Team, 4th Infantry Division, were killed by a suicide truck bomber in the northern city of Mosul in April; it was the deadliest attack against U.S. forces in Iraq in more than a year. Bombings have contributed to mounting civilian deaths. Suicide bombings in April killed more than 200 people, and one in Mosul on May 1 killed at least six.

In April, a suicide bomber wearing an Iraqi army uniform attacked a U.S. military delegation in Baqouba, the capital of Diyala Province, wounding eight of the soldiers and killing three Iraqis.

In May, an Iraqi soldier opened fire on a U.S. military team, killing two soldiers and wounding three others south of Mosul. U.S. military commanders characterize Mosul as the last urban stronghold of al Qaeda in Iraq.

Lighter Gear. In May, members of the 4th Brigade Combat Team (BCT), 4th Infantry Division, training at Fort Carson, Colo., began receiving new, lighter modular body armor vests (MBAVs). New bulletproof plates for the vests are smaller and weigh less than the ceramic inserts currently used by most troops.

The MBAV is nearly 4 pounds lighter than the improved outer tactical vest, and new boots will lighten the load by a little more than 2 pounds. Both pieces of equipment are part of a larger effort to reduce the weight soldiers must carry on missions.

The 4th BCT will deploy to Afghanistan in early summer with the lighter weight gear as well as the heavier standard equipment. Commanders will determine which to use based on conditions.

Vice Chief of Staff GEN Peter W. Chiarelli, testifying on the readiness of the U.S. Army before the Senate Armed Services Committee in April said, "When you're at 8,000 to 11,000 feet ... I don't think that any of us down here near sea level can understand what it means ... in a soldier's ability in the 10th month of a rotation to have almost 4 pounds less weight and agility to be able to fire his individual or crew-served weapon." The new lightweight gear will relieve the heavy machine gunner of more than 23 pounds and a rifleman of more than 14 pounds, GEN Chiarelli said.

Depending on how 4th BCT commanders think the vests and other improvements perform, the new equipment could be distributed to all soldiers deploying to Afghanistan in the future.

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President's Reception (5 Oct.)	.....	$45.00	.....
Eisenhower Luncheon (6 Oct.)	.....	$55.00	.....
Army Civilians' Luncheon (7 Oct.)	.....	$45.00	.....
Marshall Memorial Reception (7 Oct.)	.....	$40.00	.....
Marshall Memorial Dinner (7 Oct.)	.....	$95.00	.....

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GENERAL OFFICER CHANGES*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*



MG D.B. Allyn from CoS, XVIII Abn. Corps, Fort Bragg, N.C., to Dep. CG, XVIII Abn. Corps and Fort Bragg.



MG S.F. Cambria from Cmdr., SOCPAC, PACOM, Camp H.M. Smith, Hawaii, to Dep. Dir., Ctr. for Special Ops., USSOC, MacDill AFB, Fla.



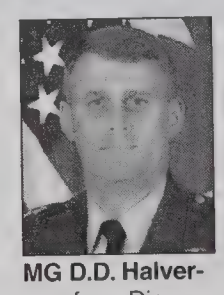
MG J.M. Custer III from CG/Comdt., USAIC and Fort Huachuca, Fort Huachuca, Ariz., to CG, INSCOM, Fort Belvoir, Va.



MG J.K. Gilman from CG, BAMC/GPRMC, Fort Sam Houston, Texas, to CG, USAMRMC and Fort Detrick, Fort Detrick, Md.



MG M.A. Graham from CG, First Army Div. West and Fort Carson, Fort Carson, Colo., to Dep. CoS, G-3/5/7, FORSCOM, Fort McPherson, Ga.



MG D.D. Halverson from Dir., Force Development, ODCS, G-8, USA, Washington, D.C., to CG, USA Fires CoE and Fort Sill, Fort Sill, Okla.



MG J.A. Macdonald from CG, FMWRC/Dep. CG, IMCOM, Arlington, Va., to Dep. CG, USF-A, OEF.



MG T.C. Nicholas from Dir. for Ops., DJIOC, DIA, Washington, D.C., to Dep. CoS for Intel., MNF-I, OIF.



MG R.J. Rowe Jr. from CG, USA MDW/Cmdr., JFHQ-NCR, Washington, D.C., to Dep. CG, Dept. of Interior Affairs, MNSTC-I, OIF.



MG P.M. Vangjel from CG, USA Fires CoE and Fort Sill to Dep. CG, Third Army/ USARCENT.

Brigadier Generals: **T.K. Adams** from Asst. SG for Force Projection/Chief, Army Veterinary Corps, OSG, USA, Washington, D.C., to CG, USACHPPM/Chief, U.S. Army Veterinary Corps, APG, Md.; **R.O. Baker** from Dep. Dir. for Politico-Mil. Affairs (Middle East), J-5, Jt. Staff, Washington, D.C., to Asst. Div. Cmdr., 1st Armored Div., USAREUR and Seventh Army; **A.W. Batschelet** from Dep. CG (Spt.), 4th Infantry Div. (M), Fort Hood, Texas, to Dep. CoS, G-3, USAREUR and Seventh Army; **R.M. Bouchard,** Dir., J-6, PACOM, Camp H.M. Smith to Dep. CoS, G-6, FORSCOM, Fort McPherson; **J.S. Buchanan** from Dep. CG (Ops.), 10th Mountain Div. (L)/MND-C, OIF to G-3/5/7, USARC, OCAR, Fort McPherson; **J. Caravalho Jr.** from Corps Surgeon, XVIII Abn. Corps, Fort Bragg to CG, BAMC/GPRMC, Fort Sam Houston; **J.P. Disalvo** from Dep. Dir. for Politico-Mil. Affairs (Western Hemisphere), J-5, Jt. Staff to CoS, III Corps and Fort Hood, Fort Hood, Texas; **B.J. Donahue** from Coordinator, LandWarNet/Battle Command, ODCS, G-3/5/7, USA, to Dir., J-6, CENTCOM, MacDill AFB; **W.B. Gamble** from Cmd. Surgeon, CENTCOM, MacDill AFB to CG, DDEAMC/SERMC, Fort Gordon, Ga.; **P.M. Higgins** from Cmdr., SOCAFRICA, AFRICOM to Dir., Special Ops. Directorate-Iraq, MNF-I, OIF; **D.R. Hogg** from CG, JMTC, USAREUR and Seventh Army to Dep. CoS, Ops., ISAF, OEF; **K.R. Horst** from Dir. for Ops., Plans, Logistics and Engineering, J-3/4, USJFCOM, Norfolk, Va., to CG, USA MDW/Cmdr. JFHG-NCR; **R.D. Jones** from AG/CG, PDA/Exec. Dir., MPSA, Alexandria, Va., to CG, FMWRC, Alexandria, Va.; **M.J. Lally III** from CG, 3rd Sustainment Cmd. (Expeditionary), OIF to Dir., Ops. and Plans (TCJ3), TRANSCOM, Scott AFB, Ill.; **S.R. Lanza** from Dep. CoS, G-3, USAREUR and Seventh Army to Dep. CoS for Strategic Effects, MNF-I, OIF; **M.A. Legere** from Dep. CoS for Intel., MNF-I, OIF to CG/Comdt., USAIC and Fort Huachuca; **A.F. Macdonald** from CoS, USARC to Asst. CG, Afghan National Police Development, CSTC-A, OEF; **K.W. Mangum** from Sen. Cmdr., Fort Drum, Fort Drum, N.Y., to CG, INCTF-TT, MNSTC-I; **D.L. Mann** from CG, WSMR, WSMR, N.M., to CG, 32nd AAMDC, Fort Bliss, Texas; **R.F. Mathews** from CG, 94th AAMDC, Fort Shafter, Hawaii, to Comdt., U.S. Army Air Defense Artillery Ctr., Fort Sill; **J.R. McMahon** from CG, U.S. Army Engineer Div., South Pacific, San Francisco, Calif., to Dir., J-7, Engineering, USF-A, OEF; **M.A. Milley** from Dep. CG (Ops.), 101st Abn. Div. (AA)/CJTF-76, OEF to Dep. Dir., Regional Ops., J-3, Jt. Staff; **R.P. Mustion** from Cmdr., USASSI, Fort Jackson, S.C., to the AG/CG, PDA/Exec. Dir., MPSA; **S.L. Salazar** from CG, CMATT, MNSTC-I to CG, JMTC, USAREUR and Seventh Army; **M.H. Shields** from Dep. Dir. for Ops., NMCC, J-3, Jt. Staff to Dir., NJOIC, J-3, Jt. Staff; **J.A. Smith** from Dep. CG (Spt.), 10th Mountain Div. (L)/MND-C, OIF to Dep. Dir. for Politico-Mil. Affairs (Middle East), J-5, Jt. Staff; **T.W. Spoehr** from Dir. of Integration, ODCS, G-8, USA to Dir. Force Development, ODCS, G-8, USA; **K.E. Tovo** from Dep. Cmdr., SOCEUR, EUCOM to Asst. Div. Cmdr., 1st Armored Div., USAREUR and Seventh Army; **S.J. Townsend** from Senior Cmdr., Fort Campbell, Fort Campbell, Ky., to Dep. CG, 101st Abn. Div. (AA), Fort Campbell; **K.C. Walker** from CG, IAG, OIF to Dir., FFID, ARCIC, TRADOC, Fort Bliss; **P.L. Wiggins** from Asst. Div. Cmdr. (Ops.), 1st Infantry Div., Fort Riley, Kan., to Dep. CG, Fifth U.S. Army North, Fort Sam Houston.

■ ***AAMDC**—Army Air Missile Defense Command; **AFRICOM**—U.S. Africa Command; **AG**—Adjutant General; **APG**—Aberdeen Proving Ground; **ARCIC**—Army Capabilities Integration Center; **BAMC**—Brooke Army Medical Center; **CENTCOM**—U.S. Central Command; **CJTF**—Combined Joint Task Force; **CMATT**—Coalition Military Assistance Training Team; **CoE**—Center of Excellence; **CSTC-A**—Combined Security Transition Command-Afghanistan; **DDEAMC**—Dwight D. Eisenhower Army Medical Center; **DIA**—Defense Intelligence Agency; **DJIOC**—Defense Joint Intelligence Operations Center; **EUCOM**—U.S. European Command; **FFID**—Future Force Integration Directorate; **FMWRC**—Family, Morale, Welfare and Recreation Command; **FORSCOM**—U.S. Army Forces Command; **GPRMC**—Great Plains Regional Medical Command; **IAG**—Iraqi Assistance Group; **IMCOM**—Installation Management Command; **INCTF-TT**—Iraqi National Counter-Terrorism Task Force-Transition Team; **INSCOM**—U.S. Army Intelligence and Security Command; **ISAF**—International Security Assistance Force; **JFHQ-NCR**—Joint Force Headquarters-National Capital Region; **JMTC**—Joint Multinational Training Command; **MDW**—Military District of Washington; **MND-C**—Multi-National Division-Center; **MNF-I**—Multi-National Force-Iraq; **MNSTC-I**—Multi-National Security Transition Command-Iraq; **MPSA**—Military Postal Service Agency; **NJOIC**—National Joint Operations Intelligence Center; **NMCC**—National Military Command Center; **OCAR**—Office of the Chief, Army Reserve; **ODCS**—Office of the Deputy Chief of Staff; **OEF**—Operation Enduring Freedom; **OIF**—Operation Iraqi Freedom; **OSG**—Office of the Surgeon General; **PACOM**—U.S. Pacific Command; **PDA**—Physical Disability Agency; **SERMC**—Southeast Regional Medical Command; **SOCAFRICA**—Special Operations Command Africa; **SOCEUR**—Special Operations Command Europe; **SOCPAC**—Special Operations Command Pacific; **TRADOC**—U.S. Army Training and Doctrine Command; **TRANSCOM**—U.S. Transportation Command; **USACHPPM**—U.S. Army Center for Health Promotion and Preventive Medicine; **USAIC**—U.S. Army Intelligence Center; **USAMRMC**—U.S. Army Medical Research and Materiel Command; **USARC**—U.S. Army Reserve Command; **USARCENT**—U.S. Army Central; **USAREUR**—U.S. Army Europe; **USASSI**—U.S. Army Soldier Support Institute; **USF-A**—U.S. Forces-Afghanistan; **USJFCOM**—U.S. Joint Forces Command; **USSOC**—U.S. Special Operations Command; **WSMR**—White Sands Missile Range.*

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Training Development for an Expeditionary Army

By GEN Martin E. Dempsey

Based on the lessons we've learned in the past eight years at war, our Army has made some remarkable adaptations in the way we train. Nevertheless, the reality of persistent conflict, hybrid threats and cyclical deployments means that we also have to become increasingly innovative in our training if we are to develop the versatile units and agile leaders required for the future.

If we've learned anything from the current conflict—and from other recent conflicts we've observed over the past few years—it is that our enemies will seek to use the full arsenal of threats against us—traditional, irregular, disruptive and catastrophic. We've learned, moreover, that our enemies will mix these threats and transition among them over the course of an extended campaign. This is an important point in developing our training strategy—the operational themes (major combat, irregular war, peacekeeping, limited intervention and peacetime engagement) are rarely separate events as currently presented in FM 7-0 *Training for Full Spectrum Operations.*

The Army is our nation's campaign-quality force. *Campaign* implies time, and time allows an enemy to adapt. This means that when we are deployed, we must be prepared for all forms of contact and be trained to anticipate the changes that occur in the operating environment during the course of a campaign. The effect of time on a campaign means that in this environment of hybrid threats, our institutional imperative becomes *versatility.*

The Army's organizational expression of versatility is the modular brigade. From an Army that was organized to optimize division operations, we have reorganized to optimize brigade operations. The modular brigade is decentralized, combined arms and enabled. While we are continually reassessing its design based on lessons learned, we are confident that it provides us a full spectrum capability—the ability to conduct offense, defense and stability operations—against current and emerging threats.

Our training should challenge this full spectrum design. Our training doctrine, FM 7-0, provides commanders the flexibility to shape their training plans, and a revised AR 220-1 will soon direct commanders to report their readiness against the mission they are most likely to execute with the understanding that time is the scarcest resource in training and building readiness.

We may have muddied the waters, however, in making a distinction between core mission-essential task lists (CMETL) and directed mission-essential task lists (DMETL) in FM 7-0. Some people, both inside and outside the Army, have suggested that CMETL is synonymous with major combat operations and that DMETL is synonymous with irregular warfare. That was never our intent.

If our organizational design—the modular brigade—is optimized for full spectrum operations, then the modular brigade mission-essential task list (METL) should reflect its ability to perform full spectrum operations. Stated another way: We should need only one METL to take priority based on the conditions a commander—in discourse with senior and subordinate commanders—expects to face at the end of the training cycle.

Units receive their missions from higher headquarters at the beginning of the training cycle. Missions can be contingency operations, preparation for standing war plans, theater security cooperation exercises, or continental United States civil-support missions. Commanders assess the conditions they will face in accomplishing their mission and, in discourse with senior and subordinate commanders, give priority to the mission-essential tasks from our doctrine and determine the conditions to be replicated during training.

Commanders render unit status reports against their readiness to execute the mission-essential tasks according to priorities established under the conditions approved by their higher headquarters. This reflects the versatility of our force, the agility of our leaders and the full spectrum capability of the modular brigade design. A CMETL-DMETL distinction should be meaningless in an Army organized, trained and equipped for full spectrum operations.

'Atrophying Skills'

Each of our branch proponents maintains an open dialogue with operational units and the institutional training base about the skills that may atrophy in an extended campaign under conditions of irregular warfare. Certain skills—in particular, skills related to mounted maneuver over distance—have atrophied. The important point is that they are not "major combat operations" skills, although that is how they are often described. They are skills derivative of our METL that prepare us for hybrid threats.

Our training scenarios, plans and exercises should be built accordingly. That is, all of our training should be done in the context of complex human terrain and hybrid threats, and should challenge our leaders with the competing demands of offense, defense and stability operations. Our Army's senior leaders understand the impact that Operations Iraqi Freedom and Enduring Freedom have had on our training. There is no intent to adapt to our boots-on-the-ground/dwell challenges by trying to rebuild atrophied skills overnight. When time

ween scheduled deployments is limted (less than 18 months), tactical ommanders should focus their train-ıg exclusively on the conditions they vill confront in executing their next ıission. When time between deploy-ıents allows, tactical commanders hould introduce changing conditions ıto training to prepare units and ıeir leaders for other potential mis-ions. **If we are true to our claim to be n expeditionary, campaign-quality, ull spectrum force, then our METL ; the constant and the conditions are ıe variable in our training and readi-ess reporting.**

'What's Different'

Because it is impossible to discuss nit training without mentioning ader development in training, we ıould consider "what's different" in ie way we intend to develop leaders the future. In the past, we developed aders by challenging them with nass" and with "compressed time." mulations were attrition-based, and aining scenarios were designed to challenge leaders to understand an enemy predictably arrayed on the battlefield and to master the factors of time and distance. To raise the bar on the leader in training, we added another enemy formation or we compressed time. This was effective in developing a leader to operate in the context of well-defined problems against an enemy who confined himself to a single operational theme.

Now we must develop leaders who are effective in the context of ill-defined problems against an enemy likely to migrate among operational themes. Now we must challenge leaders with "complexity" and "extended time." We raise the bar on the leader-in-training by adding the complexities of societal, religious, tribal and economic factors—and occasionally by adding mass—and we develop leaders who can anticipate the adaptations and transitions an enemy will make during the course of an extended campaign—that is, over extended time.

If, as conventional wisdom suggests, necessity is the mother of invention, then, in our terms, complexity is the mother of innovation. The task, then, is to replicate the challenges of complexity and extended time in the training environment—at schools, training centers and home station.

Central Training Database

As the Army's training and leader development proponent, Training and Doctrine Command is exploring ways to replicate complexity and extended time for our units and leaders in training. One initiative with enormous potential is the development of a central training database, which takes real-time data from the combat zone, "bends" it into an unclassified format and shapes it into training scenarios to replicate for leaders-in-training the density and continuity of information and intelligence available to leaders in the fight. Here is what it can mean in training: During my National Training Center rotation as commander of the 3rd Armored Cavalry Regiment in 1997, the scenario was driven with five data sources and approximately 2,500



information-and-intelligence "injects" over the two-week exercise. During the last rotation for a brigade combat team deploying to Afghanistan, the scenario was driven with 27 data sources and approximately 1.2 million information-and-intelligence injects over the two-week exercise.

The central training database will allow leaders to grapple with complex problems and to establish patterns of life, threat-network diagrams and tribal-network assessments as well as develop multiple lines of operation in the training environment. The data available through the central training database can be manipulated and tailored to challenge units and leaders with varying degrees of complexity in a variety of hybrid scenarios, at echelons of development and throughout the professional military education process. Linked to live, virtual, constructive and gaming exercises, we can replicate the challenges of complexity and extended time in the classroom, at home station and at the combat training centers. We have to continue to work on this and other training initiatives, but the technology is available and we're moving forward to take advantage of it.

As we seek innovations in our training, we will never forget that at every echelon of our profession we must still rely on our leaders to be masters of their weapons systems, skillful in unit tactics, and competent in combined arms operations and the integration of organic and joint fires. It is on that foundation of lethality and versatility—and over the course of a career—that we must build leaders competent and confident in the joint, interagency, intergovernmental and multinational environment. □

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The Army School System

By GEN Frederick J. Kroesen
U.S. Army retired

Joseph Stalin is credited with having said, "World War II was won in the factories of Detroit." Winston Churchill, however, reflecting on the quality of our officers and the Army's education system, said to a gathering of top U.S. commanders: "That you should have been able to preserve the art not only of creating mighty armies … but of leading and guiding those armies upon a scale incomparably greater than anything that was prepared for or even dreamed of constitutes a gift made by the officer corps of the United States to their nation in time of trouble."

Churchill's view of our military schools and their curricula was expressed again in 1950 by Gordon Gray, special assistant to President Harry S Truman, who, remembering the generals of World War II and speaking at a Yale Law School dinner in Washington, D.C., stated: "Only an outstanding professional education system could have prepared these men for the ready adjustment they made to these unforeseeable circumstances."

Can today's Army education system match the product of that earlier version? An easy answer cites Operations Just Cause and Desert Storm and the conquest of Baghdad—all paradigms of outstanding military operations—as proof of the quality of leadership extant among the officers and noncommissioned officers of today's Army. But another easy answer questions the leadership that failed to program a follow-on plan to pacify and organize the Iraqi population and government after the capture of Baghdad. Yet a third answer might ask why Navy and Air Force officers have supplanted Army generals in most of the senior joint commands, even those engaged in land warfare missions.

There is no doubt our system has changed. Following the Vietnam War and the establishment of Training and Doctrine Command (TRADOC), the need for refurbishing our "big war" prowess was apparent. A shift of emphasis to tactical techniques in the 1970s concentrated on the use of maneuver battalions and long-range fire support, and these were introduced into the academic programs and rewrites of our field manuals. The *operational level* and *information warfare* became watchwords of the revisions of the 1980s and, along with the maturing Noncommissioned Officer Education System, produced the nonpareil forces of the Just Cause and Desert Storm campaigns. That quality was reaffirmed in Iraq more than a decade later.

The Goldwater-Nichols Act of 198 created the demand for emphasis o joint operations and the training leaders competent in employing th forces of all services. That requireme still dominates in the curricula of a service schools, but it is now accor panied by greater attention to soci sciences at the war colleges, all which follow a common curriculu that de-emphasizes service-specif doctrines and requirements.

The result of these pressures is a sy tem that emphasizes the Warrior Eth concentrates on military tactics and o erations, and trains rather than ed cates its students. Telling them "how do it" is training; adding "why" is ed cating. Career courses are reduc from 10 months to a shorter period, involving a permanent change of s tion, studying tactical operations. T Leavenworth Command and Gene Staff Course, now Intermediate-Le Education, is still 10 months but o for the "operational track," that combat arms officers. All others atte a 179-day-or-less course, then move other institutions for another tem rary-duty study of branch-specific s jects. Given today's operational mands of regular annual rotations

ne combat theaters or other hardship ours, assignment to such a course, which results in more family separation, is not heralded enthusiastically.

The emphasis of Senior-Level Education has shifted to the political, economic and social problems at the expense of less attention to military aspects of our National Defense Strategy. High-level campaign planning is no longer studied. Corps commanders and their subordinates are well trained in "how to fight." How to get ready—that is, staff, equip, maintain, supply, transport and pursue force development and the research and acquisition required for future improvements—is taught only at the Army Force Management School to a small quota of the student population.

For many years the Army officer corps looked forward to and enjoyed sabbatical years during which the graduate education of their profession was provided by their branch career course, then by the Command and General Staff College and finally by a senior service school, a war college. Spaced over the first 20 years of service, these courses provided a logical progression of professional education appropriate for attaining higher ranking positions in the military hierarchy. They also provided a break from the constant training and operations tempo of the time and accorded the benefits of "family time," regular hours to share breakfast and dinner, time to mentor Boy Scouts, umpire for a Little League and participate in family outings. It was also time to become better acquainted with one's peers, to discuss responsibilities and contributions of other branches of the service, to appraise potential, and to develop confidences and working relationships that would pay future dividends.

This is not meant to be criticism of the Army leadership that has overseen the system evolution that has occurred. The need to do "first things first" drove the conceptual thinking of the 1970s and '80s, and the success of our combat operations at the end of that period validated the methods adopted. Then we had to cope with the drastic reduction in the size of the Army following the Cold War and the continuing mission load through the 1990s, which were principal factors contributing to the reduction of resources available to staff the faculties of Army schools and the reduction of students who could attend. The increase in missions after 9/11 stymied any major restoration of school system resources. The wars in Iraq and Afghanistan further limited personnel availability for both schools' faculties and student bodies, and resulted in the hiring of civilian contractors, mostly retired military, for many of the faculty positions in the service schools. The resort to hiring contract personnel to augment faculties, most of whom are retired military, qualified by active duty experience in the same role, in effect denies the experience to the same numbers today, officers and NCOs of a generation that will not produce the contract personnel of the next. Faculty duty has always been a breeding ground for Army thinking and was the principal source of the knowledge



that guided the superb cohort of leaders Churchill and Gray referred to in their speeches. Modifying doctrine, rewriting manuals and coping with new demands will be more difficult in the future.

Another example of the impact is the reduction of soldier attendees seeking master's and doctoral degrees at colleges and universities, from an average of 7,400 in the 1970s to just 396 in the mid-2000s. A spike to around 1,500 in 2008 did not prevent journalist Tom Ricks from noting in an April 2009 *Washington Post* article the lack of doctorates held by West Point's faculty.

The Army still has superior intellect in the active force. Generals Petraeus and Odierno have been recognized as independent thinkers who are duly respected for their work. Arguably, it has been their self-study of history and doctrines of the great military minds, however, that helped to qualify them for their leadership positions, not just the formal school system that they attended. Self-study, perhaps involving "distance learning," is an essential in every soldier's education.

Restoring the Army to an adequate end strength would allow the restoration of resources to TRADOC and Department of the Army schools to reconstitute the school system in its historic role. Here Churchill again provides the appropriate guidance, for in that same speech cited earlier, he continued: "I shall always urge that the tendency in the future should be to prolong the courses of instruction at the colleges rather than to abridge them and to equip our young officers with that special technical, professional knowledge which soldiers have a right to expect from those who can give them orders, if necessary, to go to their deaths. Professional attainment, based upon prolonged study and collective study at colleges, rank by rank and age by age—those are the title deeds of the commanders of future armies and the secret of future victories."

Whether Stalin or Churchill had the better judgment at the end of World War II is important only in identifying two requirements for guaranteeing future success. The condition of our industrial base is another subject, but the need for a highly competent officer corps that can direct and execute future mobilizations, organize the essential administrative and logistics support then direct wartime operations that win wars is an imperative.

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Iraq: Three Movements, but No Symphony

By LTG James M. Dubik
U.S. Army retired

The term *surge* is a popular catchword these days, but it is unhelpful in understanding the realities and complexities of what has happened and is happening in Iraq. Nor is it helpful in understanding what may be coming next. I've found myself using three distinct yet overlapping "operational movements" as an explanatory framework.

Unlike those in a symphony, however, these movements do not flow from a written score, there is much improvisation and the end is not yet penned.

The First Movement. This movement includes the counteroffensive that began around early spring 2007. Conducted by Coalition and Iraqi conventional and special operations forces, this counteroffensive consisted of multiple tactical actions aimed at protecting the Iraqi population, separating insurgents from citizens and reducing al Qaeda in Iraq.

During this period, the Coalition attempted to identify reconcilable insurgents from irreconcilables and begin the process of negotiating with the former while relentlessly attacking the latter. The "Awakening" and the organization of about 100,000 Sons of Iraq, who provided local security, grew out of this process.

The Iraqi security forces also grew in both size and capability during this period, adding well more than 100,000 soldiers and police to the fight.

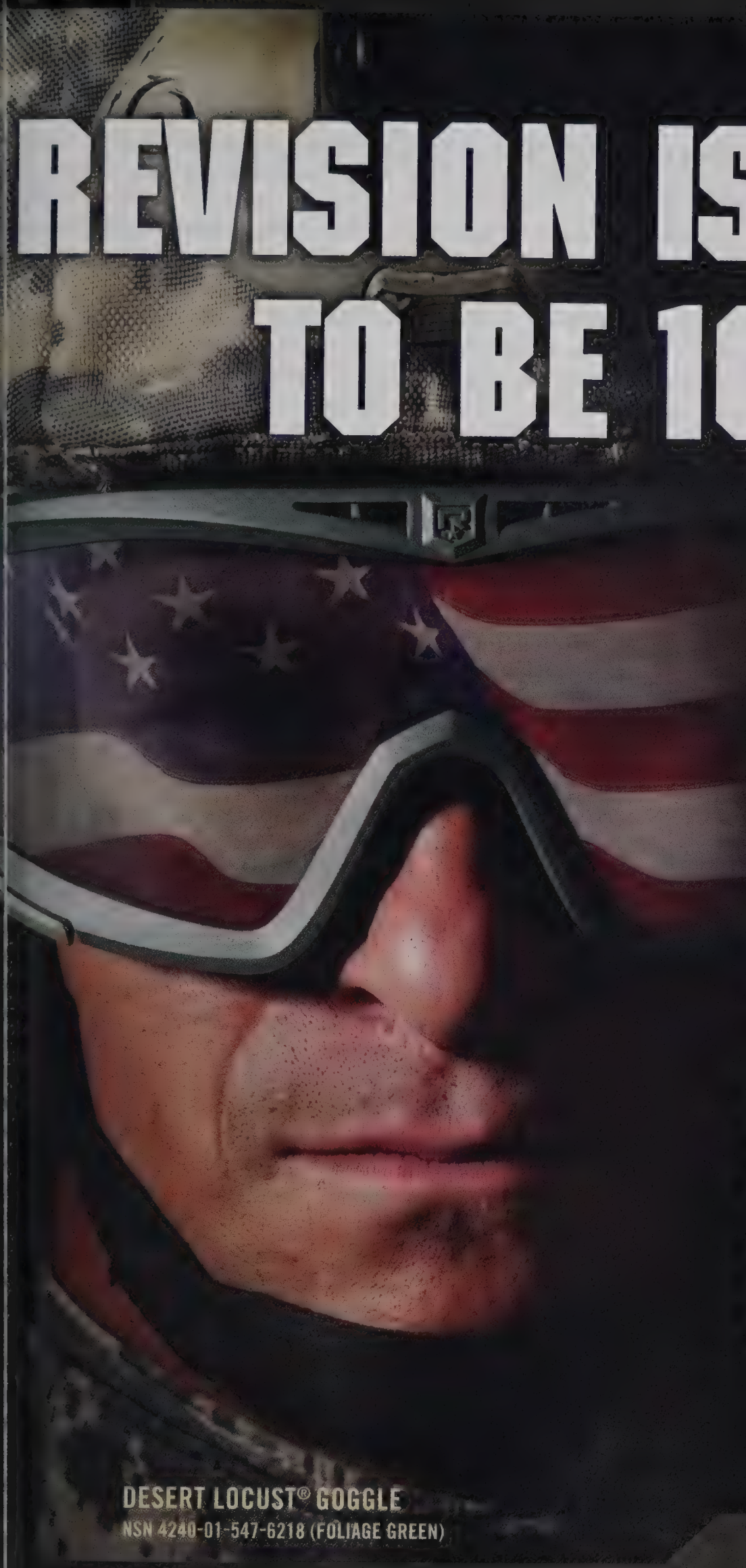
For the first time, the Coalition had enough capable Iraqi security forces to apply the "clear, hold and build" approach many had long advocated. The Coalition could continually expand the places it cleared because there were enough other forces to hold and build. Numbers matter in a counterinsurgency, where the 24/7 presence of security forces is necessary to provide citizens with a sense of security and to keep insurgents at bay.

Also key to the clear, hold and build approach was money—specifically, the availability of Iraqi security force funds to accelerate the growth and development of the Iraqi security forces aligned with the Coalition strategy, and the commander's emergency response program (CERP) funds to begin reconstruction projects immediately following clear-and-hold actions.

The expanding number and capability of the provincial reconstruction teams (PRTs) also helped guide wise use of CERP spending. Finally, during this same period Ambassador Ryan Crocker and GEN David H. Petraeus, with the Joint embassy/Multi-National Force-Iraq team, were able to help the Iraqi government pass three pieces of critical legislation: the Accountability and Justice Law, the Provincial Powers Act and the 2008 budget.

Levels of violence dropped dramatically starting in the summer of 2007. The increase in the number of Coalition forces was one very important catalyst for this decrease and for the corresponding increase in security afforded the Iraqi population. Also important, however, was the equally dramatic rise in the size and capability of the Iraqi security forces, the security provided by the Sons of Iraq, the immediate impact of PRTs and CERP spending, and the budding proficiency of the Iraqi government. The first movement had multiple submovements.

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The Second Movement. The counteroffensive changed into pursuit and exploitation—the second operational movement. This movement began with the Iraqi security force offensive in Basrah in the spring of 2008—bold in its initiation, albeit tenuous in the opening days of its execution. Tenuous turned into tenacious, however. With some critical support from Coalition forces, the Iraqi security forces completed clearing the important port city of Basrah in southern Iraq and went on to hold and build. Then several important developments unfolded.

First, the Iraqi government reached out to local leaders and initiated a program similar to the Sons of Iraq effort with which to separate reconcilables from irreconcilables. The government also created its own CERP-like program for projects of immediate value. Finally, the senior leaders of the Iraqi security forces conducted a serious, internal after action review of both the successes of their Basrah offensive and its shortcomings.

None of these three actions was perfect—none are in war—but all were good enough. Perhaps more importantly, the government of Iraq and its security forces improved in capability and self-confidence. They subsequently conducted and sustained several more offensive operations throughout the breadth and depth of the country, taking on Sunni and Shia extremists alike. In each case, the government provided a special envoy—with Iraqi money—for reconstruction and also made money available through an I-CERP (Iraqi commander's emergency response program) fund.

During this period, Sadrists launched a counterattack of mortars and rockets on Baghdad. The response of the Coalition and Iraqi security forces resulted in a cease-fire, which, in turn, again assisted in weakening the insurgency by separating reconcilables from irreconcilables within the Sadrist organizations.

Forced down during the counteroffensive, the level of violence is being kept down by continued kinetic pressure applied by the Iraqi security forces, Coalition conventional forces and special operations forces. Increasing governmental capacity, however, is also helping to improve the overall security situation and keeping violence down.

During this period, the Iraqi government assumed responsibility for the Sons of Iraq program and negotiated the status-of-forces and strategic framework agreements.

Provincial elections were held, and those political leaders seen as unable to deliver goods and services to their populations were, by and large, voted out. National elections, to be held later this year, could reveal a similar shift from the ideological to the practical.

The first two operational movements forced the irreconcilables down, but they are not out. Virtually everyone I spoke to during my recent trip to Iraq—whether U.S., Coalition or Iraqi, military or civilian—agreed that irreconcilable elements still have the capability and the will to fight. They cannot sustain operations like they could in 2006 and 2007, but they are operating and will continue to do so, inflicting pain and disrupting progress as they seek to demonstrate their continued relevance and rebuild their capacity. They have not abandoned their cause, and, given the chance, they will return. The counterinsurgency task, therefore, is to deny them that chance.

The Third Movement. The third movement, which may begin some time around the Iraqi national elections, must consolidate and expand the hard-won gains of the past two years and prevent an emboldened insurgency. Aggressively applied force is still needed, just in a different beat from what we used during the previous two movements.

The Iraqi security forces, with continued Coalition partnership, support and development, must be able to apply kinetic pressure within an Iraqi rule-of-law framework. The primary keys to strategic success during the third movement, however, derive from political "force"—generated by an Iraqi government seen to be increasingly proficient at delivering public goods and services to all elements of Iraqi society—and from economic "force" generated by private sector jobs. Absent the sufficient delivery of governmental services and an empowered private sector, an outcome that would be seen as a strategic failure for the United States remains possible.

The third movement is not the time for a hands-off mentality or a transition-to-Iraqi-control mind-set. During the third movement, we should remain partnered with the Iraqi security forces; expand the number of provincial reconstruction teams in Iraq and link their local, near-term reconstruction efforts to long-term development plans; expand the assistance we give through our embassy to the Iraqi Ministry of Justice and key nonsecurity ministries like oil, labor, manufacturing, education and agriculture; help the Iraqis remove all obstacles to private sector development; and provide incentives for U.S. companies who want to operate in Iraq. The third movement is the time to drive home strategic success.

These three operational movements are far-from-complete accounts of the past two years. The framework is a useful one, however, and reflects the complexities of real war, which neither fits the news cycle's desire for sound bites nor the pundit's need for absolutes.

The framework is also reflective of the fact that insurgencies do not end with surrender agreements—they die up over time because the insurgents can no longer attract followers. What is needed, therefore, as the second movement ends and the third begins, is simply steady improvement in Iraq's security, governance and economic sectors.

Incrementally better, not perfect, is the standard. Sustained U.S. support of the appropriate type, in the right numbers and consistent with the agreements between governments will remain necessary to meet the standard.

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234 Years of Selfless Service

By BG Harold W. Nelson
U.S. Army retired

In this Year of the Noncommissioned Officer (NCO), we reflect on the centuries of service of our Army's NCO Corps while we celebrate the entire Army's inimitable record of selfless service. That record could not have been compiled without the contributions of many generations of men and women who chose (or were chosen) to lead their fellow soldiers as the Army mastered the challenges that each of those generations faced. We know that this tradition is as old as our Army because we can read about the duties of corporals, sergeants, first sergeants and sergeants major in Baron Friedrich von Steuben's *Regulations for the Order and Discipline of the Troops of the United States.* This enduring "Blue Book" evolved from the bitter winter at Valley Forge, and its guidance fits a 21st-century Army: "Each sergeant and corporal will be in a particular manner answerable for the squad committed to his care. He must pay particular attention to their conduct in every respect; that they keep themselves and their arms always clean; that they have their effects always ready, and put where they can get them immediately, even in the dark, without confusion." The first sergeant of a company:

> ... having acquired that degree of confidence of his officers to be appointed first sergeant of the company, should consider the importance of his office; that the discipline of the company, the conduct of the men, their exactness in obeying orders, and the regularity of their manners, will in a great measure depend on his vigilance. He should be intimately acquainted with the character of every soldier in the company, and should take great pains to impress upon their minds the indispensable necessity of the strictest obedience, as the foundation of order and regularity. ... The sergeant major, being at the head of the noncommissioned officers, must pay the greatest attention to their conduct and behavior, never conniving at the least irregularity committed by them or the soldiers, from both of whom he must exact the most implicit obedience.

When these standards were published, the Army had no real system for developing its noncommissioned officers. Note the wording of the section on the first sergeant: "Having acquired that degree of confidence of his officers to be appointed." For nearly two centuries, the outstanding soldiers in a company became the corporals and sergeants. In the frequent mobilizations of our national manpower during periods of military crisis, entire regiments were raised from scratch, with most officers and NCOs learning to perform the duties of their offices while trying to teach others. Veterans of our Civil War made big improvements in the system for professional development of officers, but our Army didn't seriously begin to establish NCO academies until after World War II, and the centralized Noncommissioned Officer Education System, which has strengthened the modern Army, is a product of post-Vietnam War reforms.

Our Army may have needed a long time to recognize the big payoff from building and maintaining a professional corps of NCOs, but every leader since the earliest days knew that a capable leader team of officers and sergeants was an essential building block for a unit that would perform well. Our ancestors understood the value of loyalty, respect, integrity, personal courage, honor, and the commitment to duty and selfless service. When they found those values in soldiers, they tried to make them leaders. Those who were selected to lead then had to endeavor to learn what they needed to become technically and tactically proficient. Even in the old days of smoothbore muskets and "whites of their eyes" engagement ranges in linear warfare, this was asking a lot. An Army must be able to camp and march as well as fight if it is to prevail, and the



NCOs and officers in all of our wars and on all of our frontiers have had to perform a multitude of tasks if their units were to survive and succeed. With its assumption that leaders will learn in our schools as well as through unit experience and self-study, the Army could not be victorious without the learning that helped generations who survive to read today's ARMY.

I have been writing "birthday essays" for ARMY for several years. I usually pick a few events from 50 or 100 years ago to help us think about continuity and change. This year we should reflect on 1989, which was also a "Year of the NCO." The Army was justifiably proud of its NCO Corps. Within one generation our Army had rebuilt that corps and raised it to a higher standard than it had ever before achieved. But 1989 was the year the Berlin Wall came down. Units that had trained to fight on the North German Plain were alerted within months to ship out to help liberate Kuwait. Think about the "camp, march, fight" adjustments they had to make! Our professional NCO Corps made it look easy, and NCOs continue to lead the way.

Further Reading:

Hogan, David W. Jr., et al, general editors, *The Story of the Noncommissioned Officer Corps* (Washington, D.C.: Center of Military History, 1989)

The Noncommissioned Officer: Images of an Army in Action (Washington, D.C.: Center of Military History, 1989)

Time-Honored Professionals: The NCO Corps Since 1775 (Washington, D.C.: Center of Military History, 1989)

The Army has kept in print the materials that were prepared for the Year of the NCO in 1989; they can be found on the U.S. Army Center of Military History web site: www.history.army.mil. I found von Steuben's words in *The Story of the Noncommissioned Officer Corps.* It's still a very useful book, with lots of good stories about NCO contributions to our Army's success in its first 214 years. There's also a pamphlet, *Time-Honored Professionals: The NCO Corps Since 1775*, that reminds us that the sergeant's role as small-unit leader, technician, trainer and guardian of Army standards has been a big part of "Army Strong" for a long time. The photos of "modern" soldiers look a bit old-fashioned to all but the Cold War survivors. *The Noncommissioned Officer: Images of an Army in Action* is also still available. It's a series of 18 prints that shows sergeants at work throughout our history, reminding us that each was "modern" in his age. As an old sage once said, "If you want a new idea, look in an old book." Some of us will find new ideas about what we commemorate on this Army birthday in this year of the NCO by looking at those old books. □

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Let's Return to the 'Full Spectrum' NCO

By CSM Jimmie W. Spencer
U.S. Army retired

I have been following with great interest articles in the January and February 2009 issues of ARMY Magazine written by LTC Joseph Doty, MAJ Shawn Tenace and MAJ T.J. O'Connor ("What Goes on in Theater Stays in Theater?" and "Leadership Versus Information Technology Management—Where Do We Go From Here?"). I share the authors' concerns about the state of noncommissioned officer (NCO) leadership in the post-9/11 Army.

I am of the opinion that at the platoon sergeant level and below, the Army NCO Corps is "tilted" out of balance. This is not the same as GEN George W. Casey Jr.'s assessment that our Army is strained, stretched and out of balance. I am addressing the fact that all of our current team leaders (sergeants), most of our squad leaders (staff sergeants) and some of our platoon sergeants entered the Army after September 9, 2001—therein lies the problem.

America's Army is an army at war, supporting a nation at war, and it's doing so with an all-volunteer force. More than seven years after 9/11, our ranks are filled with great young Americans who answered the nation's call and joined our Army during a time of war. They are doing a magnificent job. Their courage, endurance and professionalism have far exceeded expectations and have made us proud. We have a world-class Army with a world-class NCO Corps. This has resulted in America's Army being the envy of all other armies, friend and foe alike. But there is something missing.

That something is, for lack of a better term, traditional NCO leadership skills. These are skills that for generations were second nature to every noncommissioned officer, skills that do not necessarily involve combat, skills that take time, practice and good mentorship to develop—skills that the post-9/11 NCOs are on the verge of losing. This is not their fault.

As we made the transition from a peacetime army to an army at war, we reexamined our initial entry training and Noncommissioned Officer Education System (NCOES), and either eliminated or reduced the amount of time we spent on noncombat-related skills. This was done for the right reasons; after all, winning the war is and should be our first priority. In so doing, however, I fear that we invoked the law of unintended consequences.

We are producing NCOs who are combat-tested warfighters in danger of losing the skills that for generations defined noncommissioned officer skills such as how to conduct in-ranks inspections, give a formal block of instruction or conduct close-order drill just to name a few. Conducting formal inspections develops and sets high standards for both the inspector and

nose being inspected. Formal instruc-
on from first-line supervisors estab-
shes them in soldiers' minds as sub-
ct-matter experts. We seem to have
st sight of the importance of basic
oldier tasks in the development of
oncommissioned officers.

Close-order drill is one example. We
ave all but eliminated it from initial
ntry training, and at the unit level it
as virtually disappeared. We seem to
ave forgotten that marching is more
an just moving troops from one
oint to another: It is about leader de-
elopment. It teaches the NCO con-
ucting the drill to give clear and con-
se orders in a forceful manner.
oldiers learn to respond instantly to
ose orders. It builds confidence and
stills habits of precision in the leader.
teaches discipline and respect for
thority. Close-order drill teaches
ssons that are important in both
mbat and training environments for
aders and for those being led.

In the past, NCOs had the ability to
alk among soldiers and make on-
e-spot corrections because they
uld instantly recognize potentially
nsafe or unhealthy situations. They
uld fix little problems before they
came big problems because they
new what "right looks like." They
t a strong sense of responsibility for
eir soldiers, much like parents feel
r their children. They would impart
isdom to junior NCOs and teach
ssons that build character. The pre-
11 NCOs developed a special bond
th their soldiers, the type of bond
at can only happen in the military.

In the post-9/11 Army, many—too
any—noncommissioned officers at
e platoon sergeant level and below
el their responsibilities as leaders
e different during the time between
ployments. They don't think the
me rules apply. Ample indicators,
ch as an increase in sexual harass-
ent, the high suicide rate and the
ich publicized situation at Walter
ed, seem to point to erosion in basic
all-unit leadership.

The first step on the road to recovery
is to recognize that we have a prob-
n that will only grow worse with time. Then we must take corrective action, action that will reverse the trend. I recommend the following steps.

- Conduct a 360-degree assessment of institutional training to ensure that we are producing well-rounded, well-balanced leaders. We should look for places to reestablish some of the training that develops traditional NCO (full spectrum) leadership skills.
- Reinvent/reinstate our unit NCO professional development programs and "sergeant's time" at company and battalion levels.
- Develop strong NCO mentor programs.
- Consider bringing back unit programs like the school of the soldier. This is not punishment. This is NCO Leadership 101, which reinforces basic soldier skills that build teams in a noncombat environment and strengthen leader/led relationships.
- Reinforce the idea that first-line superiors are responsible for their soldiers both on and off duty, in combat and at home station.
- Make a substantial investment in "educating the educators"—our NCO education system. Instructors must be carefully selected, well trained, and have the prerequisite training and education to teach at any level of NCOES.

The Noncommissioned Officer Corps did not tilt out of balance overnight. It happened slowly as the pre-9/11 NCOs moved up the chain and were replaced by the younger generation. These solutions will require time and a little tough love from the chain of command. They may necessitate taking back some of the time between deployments we have set aside as family time.

I have great faith in the Army leadership, and I am confident that this will, over time, sort itself out. I fear that if we don't act soon, however, the mature, professional, well-balanced noncommissioned officers who compose the backbone of the Army will be lost for a generation. □

CSM Jimmie W. Spencer, USA Ret., is director, Noncommissioned Officer and Soldier Programs, at the Association of the U.S. Army.



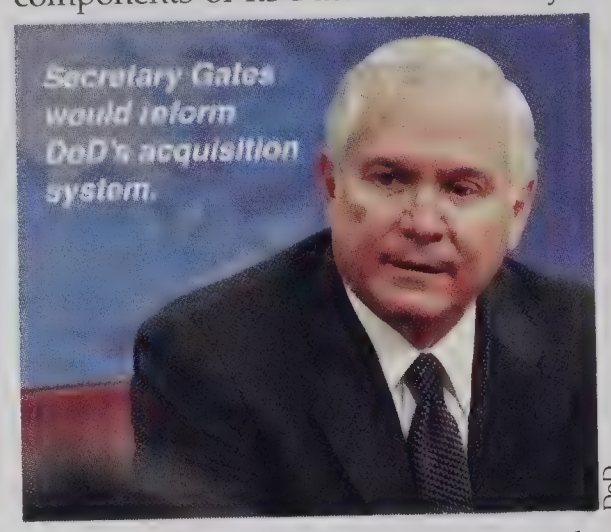
Betting the Military Farm on an Uncertain Future

By Richard Hart Sinnreich

Defense Secretary Robert M. Gates is alternately being praised and reviled for his announcement in April that the administration's forthcoming defense budget would seek to terminate or curtail several major conventional weapons procurement programs in favor of accelerating programs geared to today's and expected future low-intensity fights.

Programs on the chopping block include the Air Force's F-22 stealth fighter, production of which will be capped at 187 aircraft, 60-odd fewer than the Air Force had requested, in favor of expanded procurement of the cheaper multirole F-35 Joint Strike Fighter. Similarly, procurement of the Navy's new DDG 1000 destroyer will be limited to three ships in favor of restarting production of the older DDG 51, while aircraft carriers eventually will drop from 11 to 10 in favor of increased procurement of new and much more specialized Littoral Combat Ships.

Finally, if Gates has his way, the Army can kiss the major vehicular components of its Future Combat Systems good-bye, while ballistic missile defense advocates will have to settle for theater- and sea-based missile defenses in lieu of the Bush administration's "Son of Star Wars" land-based intercontinental missile defense program.



DoD

The intended beneficiaries of the budgetary largesse freed up by these and other cancellations and curtailments include expanded special operations forces; a significant increase in unmanned aerial platforms and other intelligence, surveillance and reconnaissance capabilities; and the continued enlargement of the Army and Marine Corps.

Finally, making no bones about his desire to reshape what he considers to be a deeply flawed Pentagon procurement culture that favors "exquisite" over affordable weapons and hypothetical future over actual current requirements, Gates promised a major overhaul of the defense acquisition system, including replacing more than 10,000 contracted personnel with full-time civil servants by 2015.

It's hard to fault the Defense Secretary's desire to support the nation's current military commitments, or his unhappiness, shared by many, with a defense acquisition process that seems increasingly during recent years tc

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have played more to the interests of weapons developers than to the needs of troops in the field. In part for that reason, perhaps, opposition to his proposals—even by senior military leaders whose acquisition programs would be adversely affected—thus far has been relatively muted.

Moreover, as Secretary Gates himself has been quick to point out, the changes he's recommending only modestly alter the balance among conventional and irregular combat capabilities. In his words: "If you broke this budget out, it would probably be about 0 percent for irregular warfare; about 0 percent for traditional, strategic and onventional conflict; and about 40 ercent for dual-purpose capabilities."

Even so, concern persists that, in anceling or curtailing major conventional weapons programs, Gates is ortgaging the nation's future ability defeat a threat more militarily capable than the irregular adversaries ith which we've had to contend uring the past several years. In response, he argues that the military for uch too long has treated such unonventional opponents as "exotic istractions" rather than the more kely challenges he insists that they ill remain for the foreseeable future.

That, of course, introduces the $64 uestion: whether our passion for seting the world to rights despite itself ill survive our experiences in Iraq nd Afghanistan. If not, Secretary ates could be making the very mistake traditionally attributed to military aders: that of preparing assiduously r the last war rather than the next.

Some will argue, of course, that the character of our future adversaries not ours to choose—that, to coin a hrase, we take the enemies we can et. Even were that true, however, othing requires us to take them on eir terms. In the end, the real quesn isn't who we may be fighting 10 15 years from now, but rather how e choose to fight them. The answer that question certainly is in our gift, should be. And it is that choice that, me fear, Secretary Gates' proposed dget may be preempting.

There is one other matter that deserves mention. While the Defense Secretary's reform is aimed mostly at procurement, his argument risks bleeding over into other areas. Most worrisome, it risks intensifying an already dangerous overconcentration of professional military education and training on small wars.

The reality is that no one in U.S. uniform has mounted a large-scale combined arms operation since 2003, and we're in growing danger of forgetting how. Despite routine praise of today's soldiers and leaders as the most battle-experienced in the nation's history, in fact for the past six years that experience has often been exclusively constabulary in character.

Secretary Gates is betting that won't change any time soon. We can only pray that he turns out to be right. □

Richard Hart Sinnreich *writes for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the April 19, 2009* Lawton Constitution *and is reprinted by permission of the author.*



Looking at Logistics



Above, mine resistant ambush protected vehicles await shipment in the staging yard at Naval Weapons Station Charleston, S.C.



Right, soldiers from the 101st Aviation Regiment perform maintenance on an AH-64D Apache helicopter at Contingency Operating Base Speicher, Iraq.



Army/SGT Keith Anderson



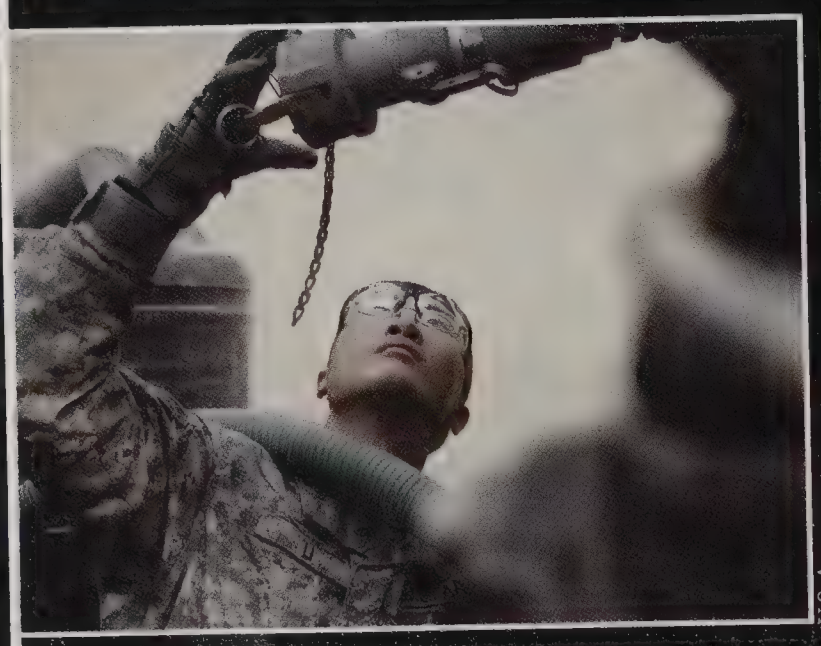
U.S. Army

Above, a civilian contractor in a rough terrain container handler unloads a container express at the central shipping and receiving point (CSRP) yard at Contingency Operating Base Q-West, Iraq, in April. The CSRP yard, overseen by soldiers from the 574th Quartermaster Co., 30th Combat Sustainment Support Battalion, 16th Sustainment Brigade, is a central point for receiving supplies at Q-West.

Left, during the first part of 2008, more than 32 heavy equipment transports arrived by rail at Camp Atterbury Joint Maneuver Training Center, Ind., from Fort Riley, Kan., to be used by an Army transportation company.

From a logistics standpoint, today's growing, transforming and deploying Army is one in which equipment and people are in constant motion.

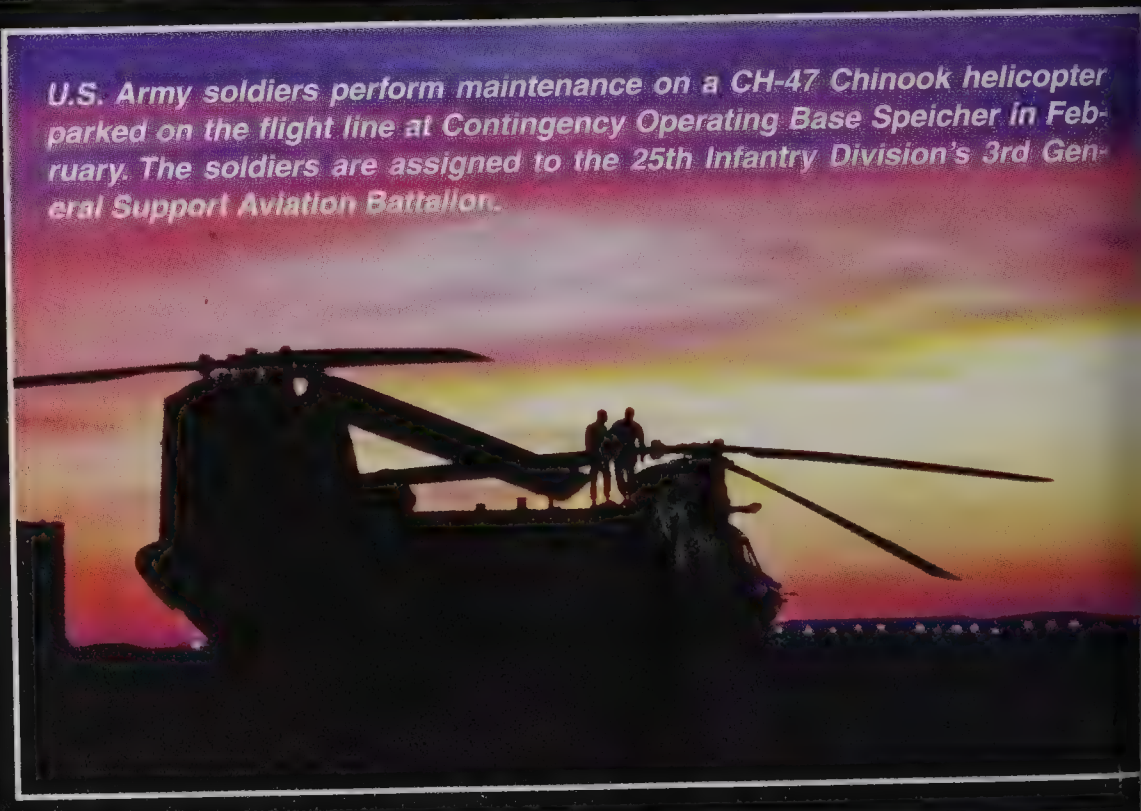




Above, SPC Wenhan Li prepares to attach a hose to a portable lift system carrying potable water to resupply Combat Outpost X-Ray in Iraq.

U.S. Army

U.S. Army soldiers perform maintenance on a CH-47 Chinook helicopter parked on the flight line at Contingency Operating Base Speicher in February. The soldiers are assigned to the 25th Infantry Division's 3rd General Support Aviation Battalion.



A convoy of mine resistant ambush protected vehicles arrives at Joint Security Station (JSS) Sa'ab al Bour in April. The vehicles were part of a 328th Brigade Support Battalion, 56th Stryker Brigade Combat Team, Deliberate Combat Logistics Patrol mission to resupply the JSS.



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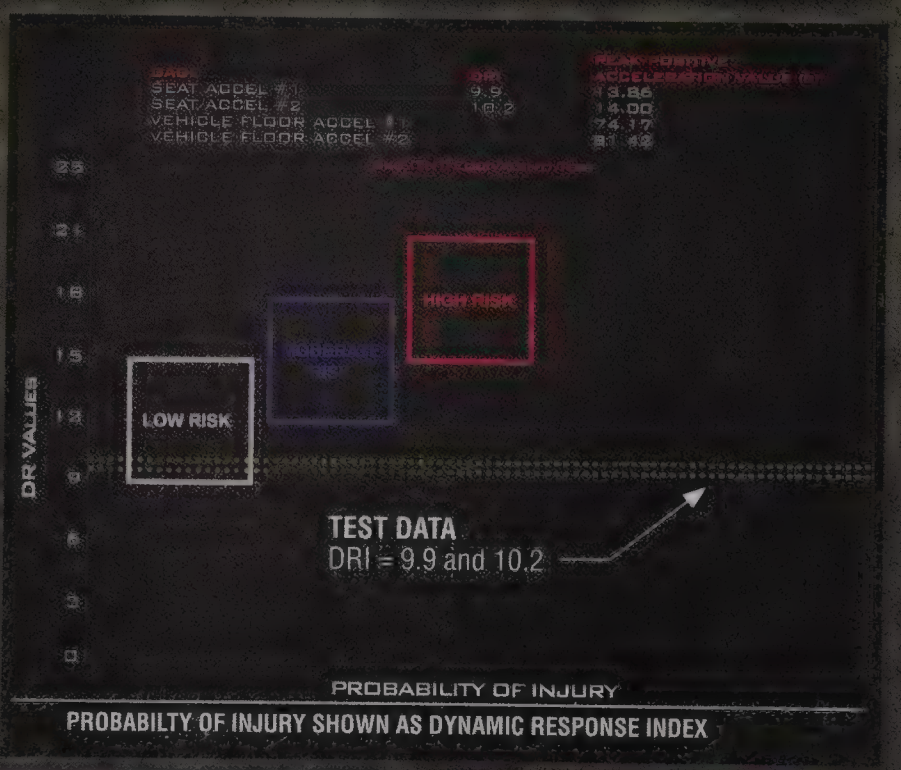
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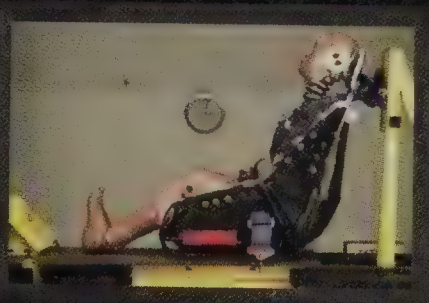


PROBABILTY OF INJURY SHOWN AS DYNAMIC RESPONSE INDEX

SAFETY IN MOTION







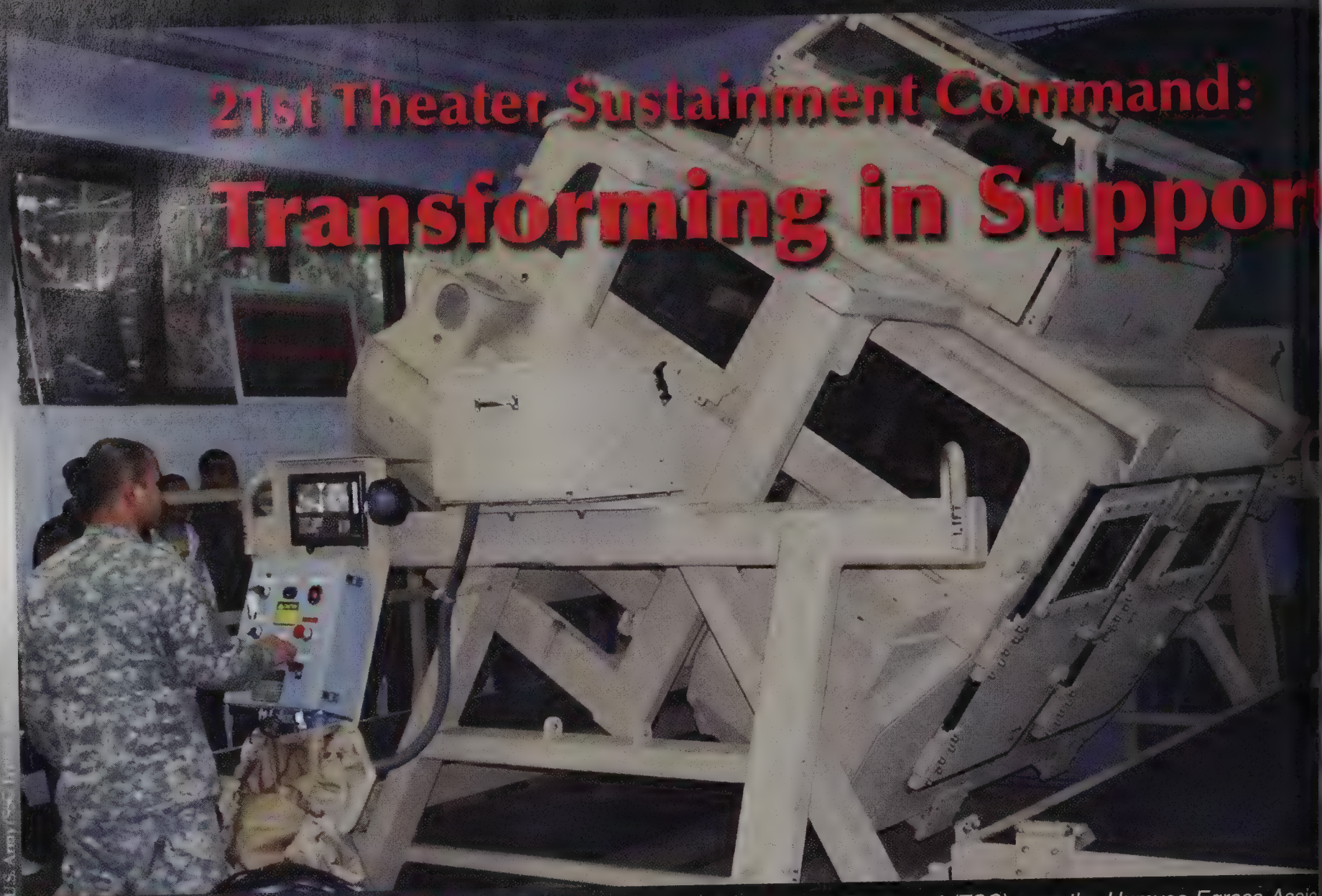
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21st Theater Sustainment Command:

Transforming in Support



Above, the 21st Theater Sustainment Command (TSC) uses the Humvee Egress Assistance Trainer to teach soldiers how to better react to vehicle rollovers. The 21st TSC provides theater sustainment throughout EUCOM and AFRICOM areas of responsibility.

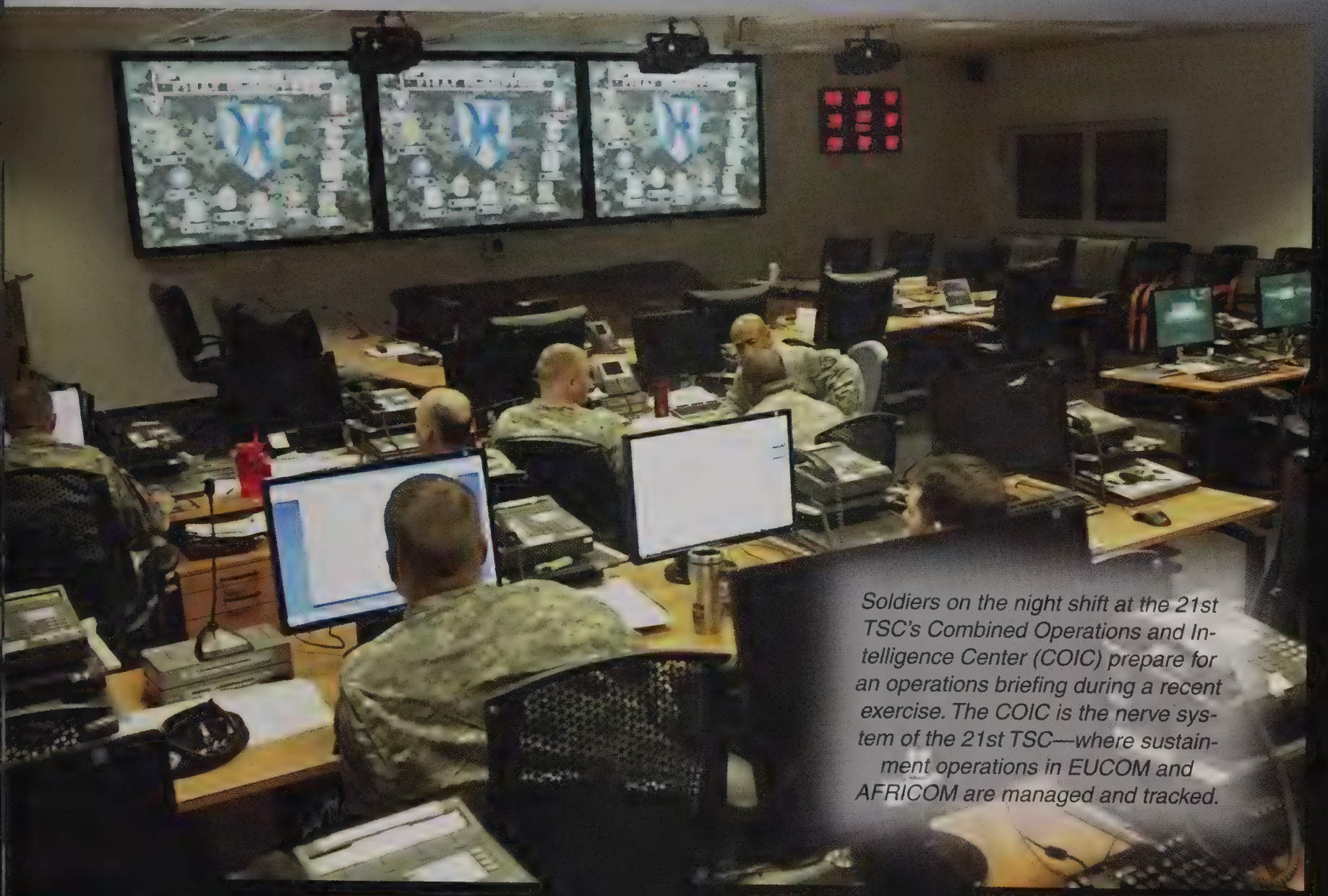
"A warfighting theater sustainment command providing expeditionary sustainment within a theater of operations while sustaining force projection and the sustainment base. A team of warriors as flexible and agile as the units we support. A war-focused outfit!"



A 5th Quartermaster Company (QM) paratrooper receives hands-on instruction from a French paratrooper about the functions and capabilities of the French parachute. The 5th QM Co. participates in about 60 airborne operations a year across the European theater with foreign militaries and other U.S. military units.

of U.S. Army Europe

By MG Yves J. Fontaine and MAJ Grant Morris



Soldiers on the night shift at the 21st TSC's Combined Operations and Intelligence Center (COIC) prepare for an operations briefing during a recent exercise. The COIC is the nerve system of the 21st TSC—where sustainment operations in EUCOM and AFRICOM are managed and tracked.

U.S. Army/Michael Bowers

In September 2005, U.S. Army Europe (USAREUR) operationalized the USAREUR plan supporting Army modularization and global rebasing, directing the downsizing and transformation of almost every Army activity in Europe. In July 2007, USAREUR officially transformed the legacy three-tiered echelons-above-brigade logistics infrastructure to a single command, the 21st Theater Sustainment Command (TSC)—the only forward stationed, active component theater sustainment command providing day-to-day operational sustainment to two combatant commands.

Since 2007, the 21st TSC has undergone a transformation—adding several enabling functions, such as human resources, finance and operational contracting, and developing an expeditionary mind-set focused on five lines of operation that guide the command as we support the day-to-day activities of USAREUR:

- Support the war on terrorism and theater operations.
- Transform the 21st Theater Sustainment Command into an expeditionary force.
- Sustain the theater base.
- Soldier and family welfare.
- Build the bench.



The 21st TSC staff work diligently inside the forward command post (FCP) during a training exercise. The FCP is a 21st TSC early-entry asset that deploys to support theater opening and distribution as well as reception, staging, onward movement and integration functions across the European and African theaters of operation.

Support the War on Terrorism And Theater Operations

As the requirement to provide trained and ready forces to the war on terrorism remains our first priority, we have developed several systems to increase our ability to educate and train both deploying units and individual augmentees. In fiscal year (FY) 2009, the 21st TSC deployed six units, redeployed 14, and currently has 33 units and 25 individual augmentees deployed in support of operations in Kuwait, Iraq and Afghanistan. Setting the stage for successful deployment, we have developed a training model focusing on individual and collective competencies which culminates in a unit-level certification exercise. Similarly, the 21st TSC has developed an individual augmentee training support package designed to quickly ready soldiers to join already deployed units. In coordination with the 7th Army Joint Multinational Training Command, in February the 21st TSC conducted a pilot program at Panzer Kaserne, Kaiserslautern, Germany, where 41 soldiers from around Germany received individual readiness training in preparation for deployment. Over the past year, we have prepared more than 4,000 soldiers for duty in Operations Enduring Freedom (OEF) and Iraqi Freedom (OIF).

In addition to our capability to train warriors, the support we provide to units deploying for the war on terrorism and contingency operations is top notch. Through the Deployment Processing Center at Rhine Ordnance Barracks, Germany, in FY 2008, we supported the deployment of 17,900 soldiers and 760 short tons of equipment. We provide robust fort-to-port and transload capabilities in support of unit rotations to Kosovo, Joint Task Force East, OEF and OIF. We provide sustainment stocks and monitor the distribution network to the U.S. Central Command area of operations, including the new northern distribution network to OEF. At the same time, the 21st TSC provides reach-back maintenance capability to Army Central Command as needed.

With one of the highest operational tempos in the Army European-based forces are constantly shifting between the combat zones and their garrisons, leaving rear detachments to shoulder the burdens of day-to-day garrison operations. One of the primary missions of the Sustainment Command is to relieve the rear detachments of their vehicle and equipment maintenance requirements; this is done through the left-behind equipment (LBE) program. The LBE program takes the maintenance burden from rear detachments by inventorying and removing nondeploying equipment from the unit's property book, maintaining that equipment to the Army's 10/20 standards, and storing the equipment until the unit returns.

Since the inception of the LBE program in FY 2007, the

MG Yves J. Fontaine *currently serves as commanding general, 21st Theater Sustainment Command, U.S. Army Europe (USAREUR) and Seventh Army. Previously, he served as deputy chief of staff, G-4, USAREUR, and commanding general, 1st Corps Support Command, XVIII Airborne Corps, Fort Bragg, N.C., and Operation Iraqi Freedom, Iraq. He holds master's degrees in advanced military studies from the U.S. Army Command and General Staff College and in business from Webster University.* ***MAJ Grant Morris*** *serves as a plans officer for the 21st Theater Sustainment Command. He is a graduate of the School of Advanced Military Studies and has master's degrees in logistics management and in military operational art and science.*

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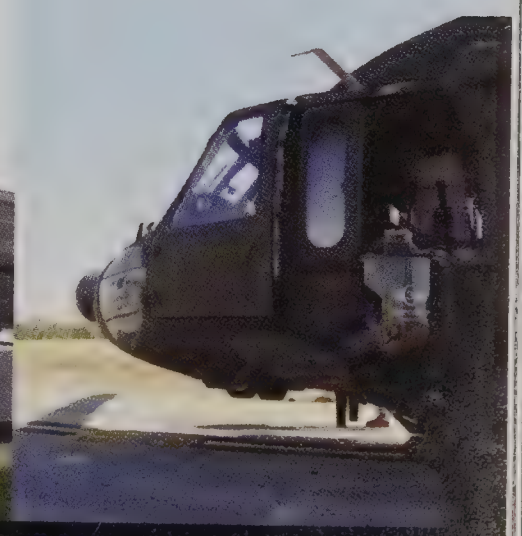
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A truck loads a UH-60 Black Hawk helicopter onto a barge. Barges are one of many methods used by the 21st TSC to transport equipment and supplies across the European theater.

TSC has continually refined the process of equipment induction to streamline equipment handover and accountability. In the initial program, unit equipment was consolidated in unit motor pools and contractors were hired to maintain the equipment at seven different sites around Germany. Because this initial method of maintaining LBE proved cumbersome and difficult to manage, in FY 2008, USAREUR adopted the Army Materiel Command (AMC) model of consolidating equipment into two sites, thus reducing the need to oversee multiple storage sites. In FY 2009, we will further consolidate LBE under the mega-hub concept at the Theater Logistics Support Center-Europe (TLSC-E) in Kaiserslautern with a smaller, tracked vehicle repair facility in Livorno, Italy. This new model maximizes our resident local-national workforce and reduces storage and maintenance costs. Over the past two years we have aggressively worked to close six of 10 operating sites, and by FY 2010 the remaining sites will close.



Soldiers from the 18th Military Police Brigade, 21st TSC, form a four-man stack outside a doorway as they attempt to clear a mock Iraqi village at the newly constructed forward operating base on Panzer Kaserne in Kaiserslautern, Germany.



U.S. Army/Jennifer King

ransform the 21st TSC into an Expeditionary Force

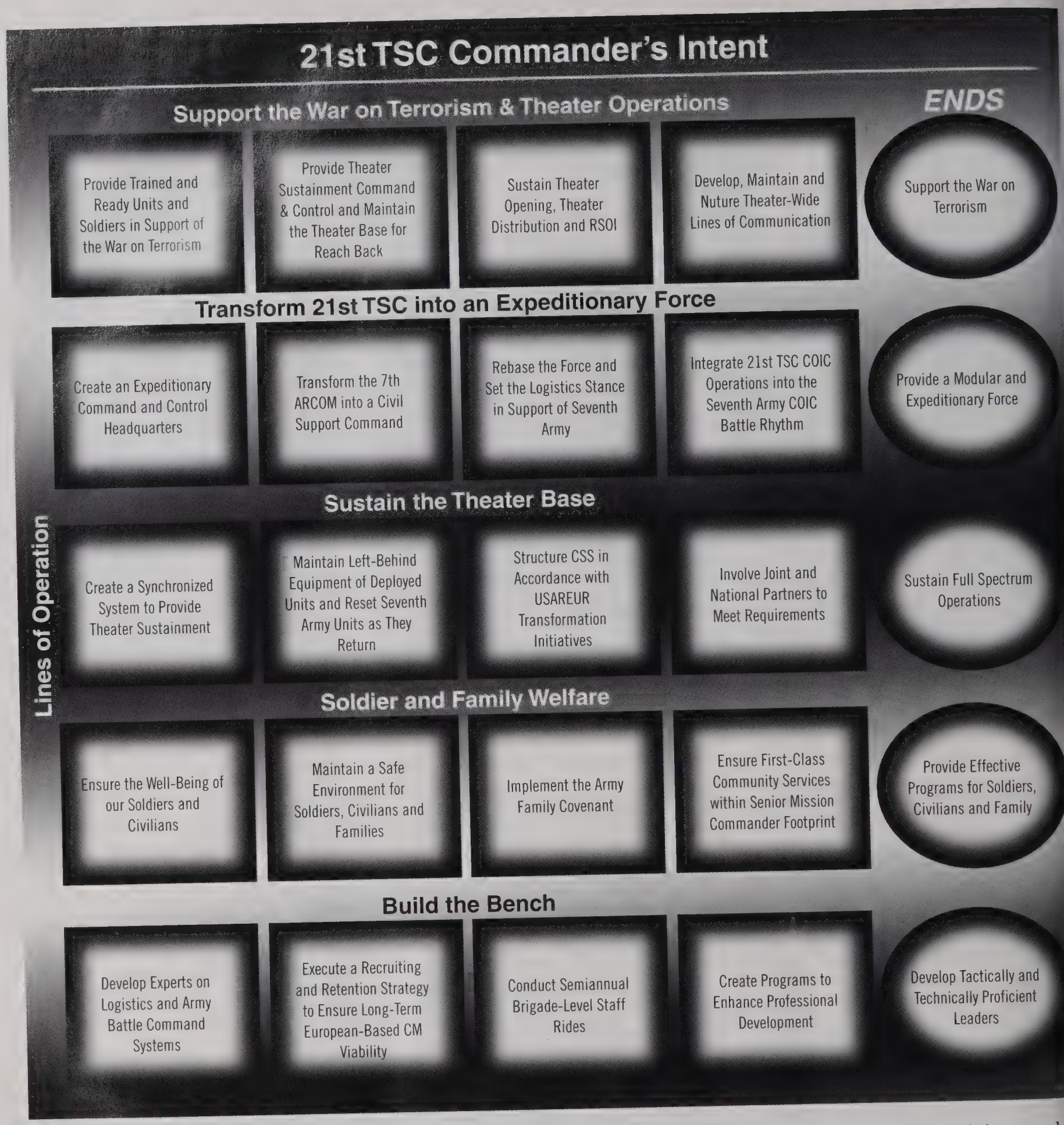
Over the past two years, the 21st TSC has transformed rough a combination of organizational, cultural, physical nd training conversions, enabling us to provide sustainent in support of multiple operations over long distances the U.S. European Command (EUCOM) and U.S. Africa ommand (AFRICOM) areas of responsibility. We streamned the staff processes and the commander's decision cye by implementing the combined operations and intelligence center (COIC) within our main command post. This hift—which broke down traditional barriers to staff collaboration—along with the integration of several autoated systems and strategic partners, has improved the uality and timeliness of information available to 21st TSC nior leaders.

To accompany the development of our COIC, we have so built a tailorable command post that can be deployed short notice to synchronize sustainment. This capability ovides the USAREUR commander with a forward logisc command-and-control node anywhere in the EUCOM d AFRICOM areas of responsibility until an expedinary sustainment command can be used to command d control the operation. Once deployed, the forward mmand post provides the Army service component mmander the ability to command and control theater ening, initial distribution operations, and reception, aging and onward movement of forces, while allowing r simultaneous European-theater sustainment from the OIC. With this new capability, EUCOM can use the land mponent's logistics command and control and theater opening infrastructure to provide unity of command while a single logistics headquarters synchronizes and clarifies support requirements across the services.

The initial test of our main command post COIC and forward deployed command post came in May 2008 when the 21st TSC participated in Exercise Austere Challenge 2008, a EUCOM-directed exercise designed to train and certify a joint task force to conduct joint operations in response to a crisis affecting the EUCOM area of responsibility. During the exercise, the 21st TSC successfully forward deployed a command post and sustained the land component in major combat operations while simultaneously maintaining EUCOM-wide sustainment from our main command post in Kaiserslautern.

The Austere Challenge series of exercises allows the 21st TSC forward command post and COIC the ability to synchronize sustainment by linking to a joint force land component command (JFLCC), joint task force and other service components through boards, bureaus, centers, cells and working groups. As we move forward to Exercise Austere Challenge 2009, our focus is to operate as the JFLCC J4 and exercise our command and control through increased split-based operations, maintaining the majority of the command's capability in the main command post and using reach back for capabilities outside the joint operating area.

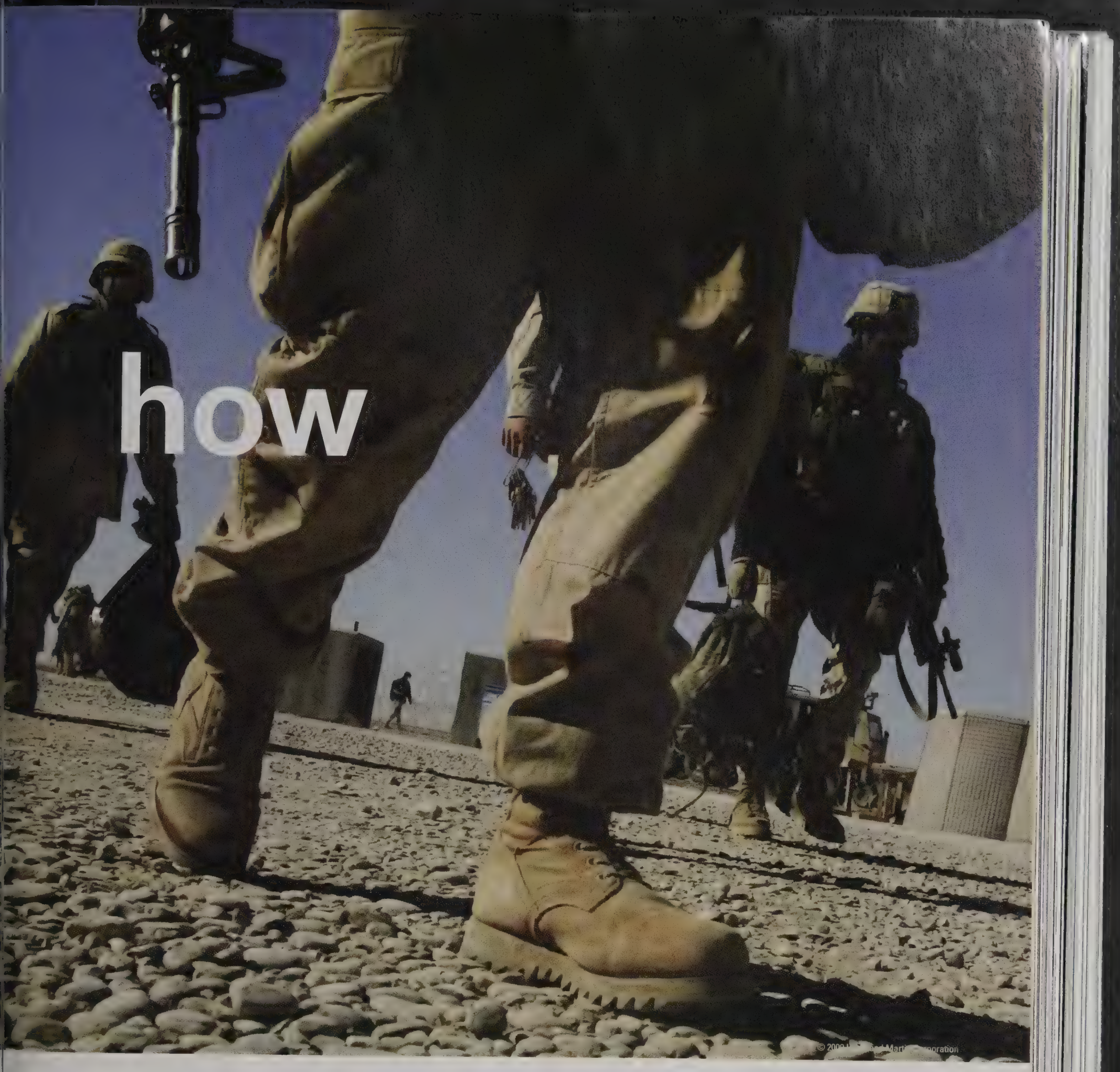
After Austere Challenge 2008, the 21st TSC was tasked to support the humanitarian crisis in the country of Georgia (Operation Assured Delivery) in August and September 2008. With virtually no forewarning, a small element of



the 21st TSC headquarters deployed and formed the core of the EUCOM Joint Assessment Team (EJAT), integrating members of the Navy, Marine Corps, Air Force and Army Reserve forces into our staff. Throughout the crisis, the EJAT validated many of the processes and procedures developed by the 21st TSC during Austere Challenge 2008. While the 21st TSC provides a number of joint sustainment capabilities to EUCOM on a daily basis as the lead service or executive agent, this operation provided a significant opportunity to mature our ability to provide joint sustainment during expeditionary operations.

As the single Army logistics command in USAREUR, the 21st TSC has the responsibility to maintain an expeditionary logistics capability and a garrison-based sustaining capabi ity. By 2010, the vast majority of the TSC's expeditionary ca pability will reside in the 16th Sustainment Brigade, whic stood up in FY 2007 enabling the TSC to support two contir gency operations simultaneously. The brigade will provic maintenance, supply, ammunition, transportation, aerial d livery, human resources, finance and deployment support t the 21st TSC and USAREUR with two combat sustainme support battalions and two movement control battalions.

Complementing this expeditionary capability is th TLSC-E. Headquartered in Kaiserslautern, this organiz tion consists mostly of German civilians and is nondeplo able. Its mission is to provide USAREUR with a theat



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Contracted mechanics under the 21st TSC perform maintenance on left-behind equipment (LBE) from the 12th Combat Aviation Brigade while the unit is deployed. Theater Aviation Sustainment Maintenance-Europe (TASM-E) is charged with inspecting and maintaining unit LBE, which primarily consists of aviation and ground equipment such as vehicles, generators and trailers. TASM-E falls under the operational control of the 405th Army Field Support Brigade and under further control of the 21st TSC.

sustainment base consisting of maintenance, supply, ammunition and transportation.

As part of the sustaining base mission, the 21st TSC partners with our national providers, the 405th Army Field Support Brigade (AFSB), the 409th Contracting Support Brigade (CSB), the Defense Logistics Agency-Europe (DLA-E) and the 598th Transportation Group. Together with the TLSC-E, these organizations provide the core capabilities to support deploying units and sustain the theater base. The 405th AFSB provides acquisition, logistics and technology integration, as well as sustainment aviation maintenance, while the 409th CSB provides contingency contracting to both the theater sustainment base and expeditionary forces. DLA-E provides centralized multi-class stockage and distribution. The 598th Transportation Group is our link to the Surface Deployment and Distribution Command and therefore our link to the global distribution systems. In coordination with the TLSC-E's capabilities for centrally managed programs, such as the national maintenance program, reset, recapitalization, application of modification work orders, and other commodity-specific repair programs, the 21st TSC is capable of providing theater-wide sustainment support for USAREUR.

In addition to our sustainment capabilities, the 21st TSC boasts a wide range of combat support skills such as law enforcement, operational contracting and explosive-ordnance disposal. Adding to these capabilities, in 2007 USAREUR assigned its Cold War-structured 7th Army Reserve Command, focused on rear-area security, to the 21st TSC and charged the 21st with transforming this organization into the 7th Civil Support Command (CSC) by 2009. The 7th CSC focused on providing consequence management and civil affairs capability to USAREUR, the goal being a fully operational headquarters by 2011.

In 2008, the 21st TSC added two new organizations, the 266th Financial Management Center (FMC) and the Human Resources Sustainment Center-Europe (HRSC-E), to provide the 21st TSC with the capability to sustain theater-level personnel support to USAREUR units and to conduc

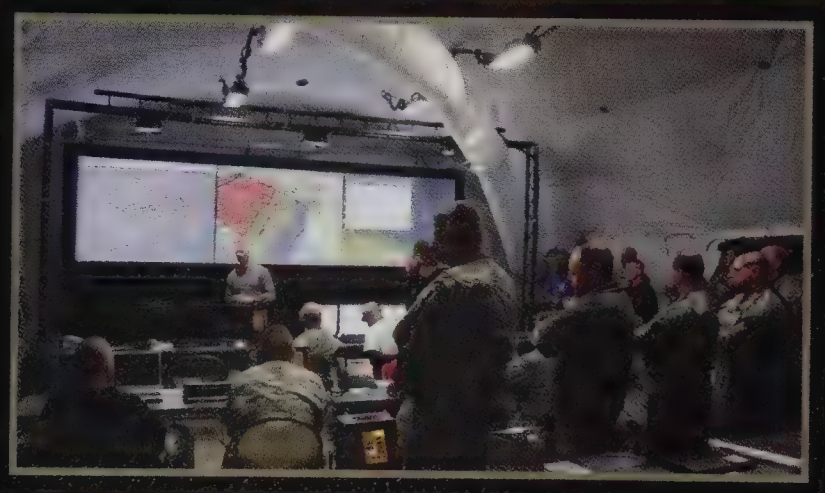
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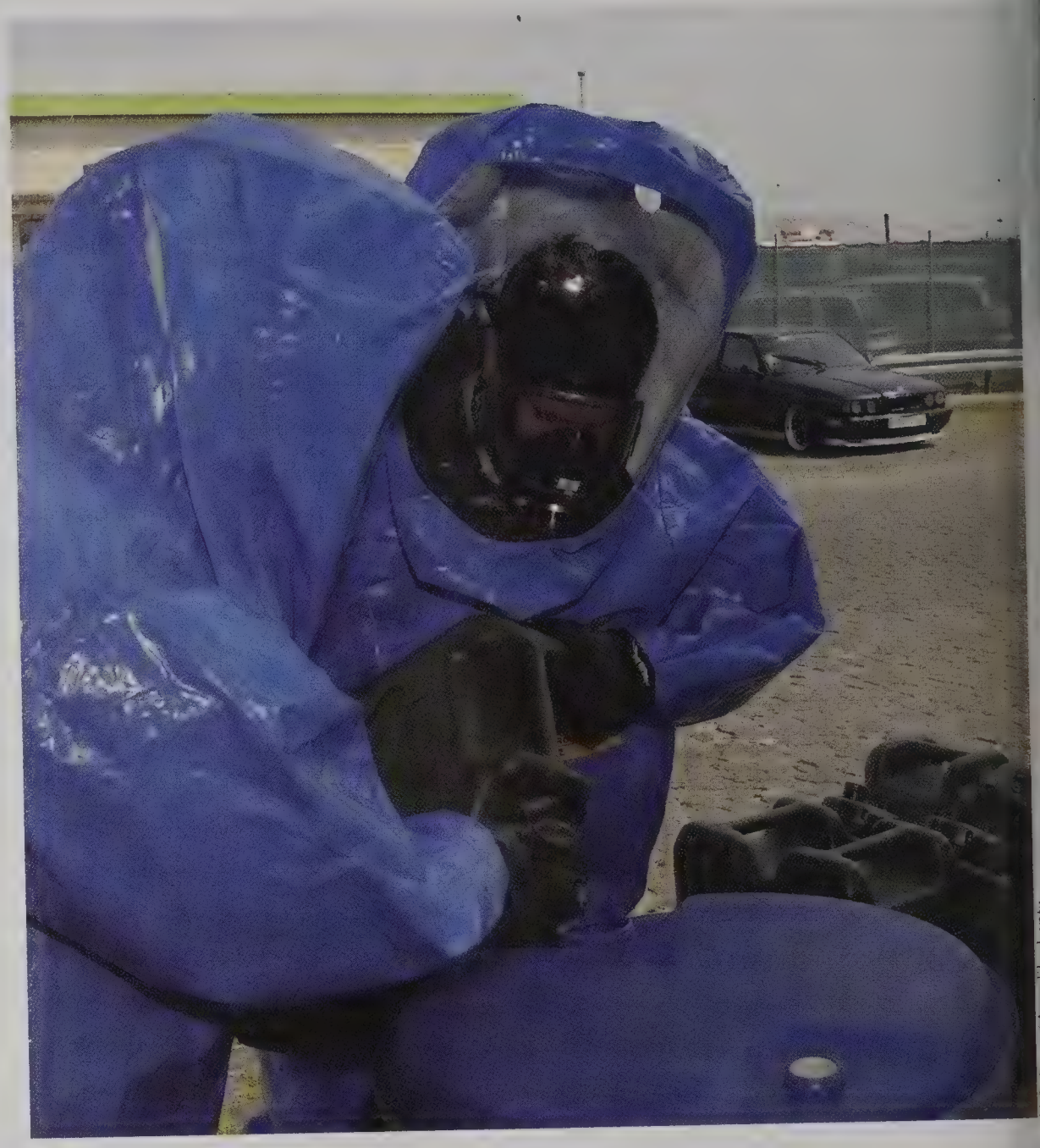
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Sustain the Theater Base

In addition to providing maintenance support to units while deployed, the 21st TSC provides critical reset maintenance support to units during their entire redeployment cycle. Under a new Department of the Army reset model, the reset process starts 180 days before a unit completes its combat rotation. The 21st TSC, with AMC forward deployed assets in Iraq and Afghanistan, works to determine the source of repair (or reset) for thousands of pieces of deployed equipment. Some major end items are sent to AMC depots in the continental United States for reset, while others are repaired at one of four maintenance sites managed by the 21st TSC across Europe. Every piece of equipment is tracked to its source of repair, through its progress during the maintenance program, and finally to delivery to the user in time for the unit's next deployment training cycle.

Over the next five years, the TSC will continue to develop five centers of excellence (CoEs), providing consolidated sustainment-level maintenance with satellite storefront operations within the enduring communities. Three of these centers consolidate maintenance capabilities which reside in the TLSC-E in Kaiserslautern; the fourth will use AMC's Theater Aviation Sustainment Maintenance-Europe (TASM-E), operated by the 405th AFSB; and the fifth center uses the DLA's Defense Distribution Depot Europe (DDDE).

In Kaiserslautern, the TLSC-E commands and controls the Maintenance CoE, providing field-level maintenance in support of the LBE program and sustainment-level wheeled-vehicle maintenance in support of the theater. This year, we will consolidate both Army-owned logistics automation systems repair and program manager-owned radio frequency identification tag repair in Kaiserslautern to develop the Standard Army Management Information Systems CoE. The Communications CoE, which will have initial operating capability in Kaiserslautern in FY 2013, will support joint network node, electronic warfare equipment, communications security equipment, night vision, tactical satellite and legacy communications equipment. At end state, each of the CoEs will provide a storefront capability within each community to establish work orders and to expedite the retrograde and return of unit equipment. These CoEs and storefronts provide USAREUR units with one-stop shopping for all supply and maintenance needs.

The fourth CoE, the Aviation CoE operated by the 405th AFSB in Ansbach, provides sustainment-level maintenance. By 2011, this CoE will be colocated with the 12th Combat Aviation Brigade (CAB) and will augment the CAB's limited sustainment-level maintenance capability. The AFSB's TASM-E currently provides reception, staging and onward movement, modification work orders, aircraf reset, crash and battle-damage repair and downed-aircraf recovery support within the EUCOM area of responsibility

The final CoE, the Distribution CoE in Germersheim, i operated by DDDE. It combines the Theater Consolidate Shipping Point-Europe with the Army-owned, DLA-man aged, demand-supported serviceable stocks warehous Since 2006, this marriage between supply and transporta tion has created a theater-wide distribution capabilit unique to USAREUR. By 2012, DDDE will include haz ardous material storage and distribution.

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MSG David Marbut from Headquarters and Headquarters Company, 21st TSC, carries the next piece of temporary flooring for the 21st TSC's forward command post.

U.S. Army/SPC Jason Nolte

is the establishment of strong theater security cooperation and host-nation engagement programs. Within the 21st TSC COIC, we have developed a robust host-nation coordination and civil-military operations capability. In 2007, this organization took on the daunting task of expanding the command's reach to Eastern European nations while maintaining solid relations with our historic European partners. As the EUCOM lead service for common user land transportation and theater movement control, the 21st TSC regularly exercises the ground lines of communication from Germany to Kosovo, in support of KFOR, and the Black Sea countries of Romania and Bulgaria, in support of Joint Task Force East. In addition to exercising our lines of communication, the command regularly participates in cooperation exercises as far east as Georgia and Azerbaijan and recently tested the distribution network from central Germany to Baku, Azerbaijan. In April 2009, we rekindled our relationship with one of our longest standing partners, and we are currently working with the United Kingdom's 102nd Logistics Brigade in Exercise Austere Challenge 2009.

Soldier and Family Welfare

As with every Army organization, soldiers and their families are our center of gravity—without them we could not accomplish the many changes necessary to transform the 21st TSC into an expeditionary sustainer. In addition to our continued focus on soldiers, we have instituted many new programs aimed at caring for the families of our deployed soldiers and wounded warriors through the Army Family Covenant (AFC).

In November 2007, the AFC proclamation was signed in Kaiserslautern, transforming the way the 21st TSC cares for the families of our deployed soldiers and the soldiers in the warrior transition unit (WTU). Since the signing of the AFC, many changes have taken place for 21st TSC soldiers. Most notably, AFC provides a wide range of services for spouses of deployed soldiers through the child development centers and youth services aimed at reducing the cost of child care and easing the financial burdens of our family members. In addition to providing care for our spouses, AFC dollars were used to renovate the WTU facilities at Landstuhl Regional Medical Center and provide free shuttle bus service for WTU soldiers attending medical appointments.

In the Kaiserslautern military community, many of the services available to families are offered by the U.S. Air Force in Europe (USAFE) at Ramstein and Vogelweh Air Force bases. To ensure that Army families receive AFC benefits on Air Force installations, USAREUR and USAFE signed an interservice support agreement in November 2008 creating a Joint base concept for the community. Now families of deployed soldiers can receive the same AFC benefits in their home communities.

Build the Bench

In 2009, the U.S. Army announced the Year of the Noncommissioned Officer. With this renewed Armywide focus on NCO leadership, the 21st TSC enacted several programs aimed at the development of tactically and technically proficient NCO leaders. To facilitate quality training, over the past two years we have created tremendous training capabilities at Panzer Kaserne in Kaiserslautern. Commanders have the ability to train their soldiers on all weapons systems in the engagement skills trainer; train individual skills, small-unit tactics, fieldcraft and precombat checks in the virtual battlespace 2; and drill soldiers on rollover safety in the HMMWV egress assistance trainer. In addition, we have added the capability to train collective tasks in our mock-up village and forward operating base.

Since its 2007 transformation from a theater support command to a theater sustainment command, the 21st TSC has undergone many changes, from centers of excellence to expeditionary capabilities to family programs. In less than two years, the 21st TSC has established itself as the single Army logistics provider in Europe. As USAREUR continues its transformation over the next four years, the 21st TSC will continue to right-size the logistics community while we fine-tune the logistics stance to better serve USAREUR's transformational evolution. We see a host of small but significant changes in our business practices to better support the war on terrorism and sustain theater operations. We will accomplish these missions while sustaining the well being of soldiers, families and civilians. Through it all, the 21st Theater Sustainment Command remains a war-focused outfit … first in support.

Building and Maintaining Army Readiness and Combat Power

FIELD MANUAL 4-0 SUSTAINMENT

By MG James E. Chambers







The release of Field Manual (FM) 4-0 *Sustainment* represents the doctrinal transformation supporting the modular force. It is the Army's keystone document for sustainment in support of full spectrum operations and serves as the basis from which other sustainment doctrine is developed. This new edition of FM 4-0 discusses the warfighting function of sustainment introduced in FM 3-0 *Operations*. Sustainment is defined as the provision of logistics (the science of planning and carrying out the movement and maintenance of forces), personnel services (human resource support, religious support, financial management, legal support and band support) and health service support (all support and services performed and arranged by the Army Medical Department to promote, improve, conserve, or restore the mental and physical well-being of personnel in the Army) necessary to maintain forces until mission accomplishment. FM 4-0 describes how sustainment builds and maintains combat power, supports strategic and operational reach, and ensures that Army forces have the readiness and endurance for sustained land operations.



DoD

The forward section of a C-5A Galaxy lifts to allow loading of bulky items. One of the largest aircraft in the world, the C-5 carries all of the Army's air-transportable combat equipment.

FM 4-0 is a departure from the previous edition, *Combat Service Support*. The Army removed the terms *combat arms, combat support,* and *combat service support* from its lexicon with the publication of FM 3-0 in 2008. Included under the sustainment warfighting function is support to internment/resettlement and detainee operations. Explosive ordnance disposal, although under a sustainment proponent, is executed as a function of protection.

FM 4-0 introduces the eight principles of sustainment that guide commanders in the operations process—in planning, preparing, executing and assessing sustainment operations. The eight principles are: integration, anticipation, responsiveness, simplicity, economy, survivability, continuity and improvisation. Integration is considered to be the critical principle because it joins and synchronizes all of the elements of sustainment (tasks, functions, systems, processes and organizations) with operations, ensuring unity of purpose and effort.

Maintaining Army Readiness

FM 4-0 highlights the generating force's contributions toward maintaining Army readiness and building combat power. Army generating-force organizations (formerly known as the institutional Army) provide the essential requirements to Army forces in preparation for full spectrum operations; their primary mission is to build and sustain operating-force capabilities for employment by joint force commanders. Generating forces maintain the Army's readiness by staffing highly skilled and trained soldiers and leaders; providing materiel (supplies and equipment); maintaining soldier and family readiness (medical, legal and religious support); and sustaining full spectrum operations. These activities are specified and implied in Title 10 of the U.S. Code. Generating-force organizations—such as Army Materiel Command (AMC), Medical Command and Human Resources Command—play pivotal roles in building and maintaining combat power; Training and Doctrine Command's schools and centers are responsible for training professional soldiers dedicated to providing logistics, personnel services and health service support to the Army.

The increasingly interconnected global environment allows generating forces to apply their sustainment capabilities directly within the joint operational environment. Army Sustainment Command, a subordinate command of AMC, is a principal generating-force organization that works in close coordination with national sustainment and distribution organizations, including the Defense Logistics Agency, U.S. Transportation Command and theater sustainment commands.

FM 4-0 emphasizes the joint, interdependent nature of sustainment. Joint interdependence is the purposeful reliance by one service's forces on another service's capabilities in order to maximize the complementary and reinforcing effects of both. The mutual reliance on a service's sustainment capabilities enables effective utilization of constrained resources. For example, the Army provides common user logistics support to other ground forces as either the wartime executive agency or under the combatant commander's directive authority for logistics.

Building Combat Power

Operating-force sustainment organizations maintain combat power. The primary mission of operating forces is to conduct and sustain combat operations. By law, operating forces are assigned to combatant commanders.

The theater sustainment commands integrate and execute support across the operational and tactical levels with reach to national providers. They also provide human resource support and financial management. The expeditionary sustainment command controls and commands sustainment operations as specified under a mission, enemy, troops, terrain, time and civil considerations-driven command-and-control relationship with the theater sustainment command.

MG James E. Chambers *is the commanding general, U.S. Army Combined Arms Support Command and Fort Lee, Fort Lee, Va. Prior to his current assignment, MG Chambers served as the commanding general/commandant, U.S. Army Transportation Center and School, Fort Eustis, Va. He holds an MBA in logistics management from the Florida Institute of Technology, and his military education includes the Command and General Staff College and the Army War College.*

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DoD/SSgt James L. Harper Jr., USAF

SGT Robert McNeely, 824th Quartermaster Company (Aerial Delivery), loads a container delivery system of food onto a C-17 Globemaster II aircraft before an airdrop in Afghanistan in February.



Richard Killblane, USATCS

Members of the 1498th Heavy Equipment Transport of the California Army National Guard hook up tractors to trailers as the convoy prepares to get under way from Camp Buerhing, Kuwait.

The modular medical command (deployment support) serves as the senior medical headquarters in a theater. It provides medical support to Army and joint forces.

At the tactical level, each brigade combat team has an organic brigade-support battalion organized to support the brigade. This multifunctional sustainment organization provides logistics and medical support to its brigade combat team.

FM 4-0 discusses command and control from a sustainment commander's perspective. Linked to FM 3-0, it covers the art of battle command. The manual provides insights into how sustainment commanders, from their unique supporting role, utilize a host of tools and processes to understand, visualize, describe and direct sustainment forces. They must have an understanding and knowledge of the interrelated sustainment activities throughout the operational environment. They must visualize the employment of sustainment capabilities at their disposal and then describe and direct how those capabilities support operations.

Sustainment is controlled from the strategic to tactical level. It requires a collaborative network of information systems that provide commanders with situational awareness. FM 4-0 covers the role of the sustainment warfighting staff in headquarters elements. The staff is responsible for integrating sustainment within the operations process, ensuring unity of effort. Sustainment commands oversee distribution management via a network of information systems that enable commanders to make crucial decisions at critical points in order to direct support where and when it's needed.

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The Army stages a convoy through Sharana, in eastern Afghanistan, where rugged terrain and lack of highways contribute to the challenge of sustaining U.S. forces.

Reach and Endurance

Integrating sustainment with the operations process is vital for ensuring unity of effort. FM 4-0 addresses planning, preparing, executing and assessing sustainment operations. The manual introduces the concept of sustainment preparation of the operational environment, which is the analysis conducted by staffs at every level to assess infrastructure, environmental factors and/or available resources within the operational environment. This analysis helps commanders determine the availability of host-nation and contract sources to support Army forces. It also identifies potential hazards that may require planning adjustments; the web-based operations logistics planner is a source for logistics and other sustainment planning data.

Preparation for sustainment begins long before commencement of operations. FM 4-0 emphasizes the importance of preparation to ensure successful mission accomplishment. The negotiation of host-nation support and agreements is pivotal to the preparation process. For instance, through negotiations and agreements, sustainment planners can potentially minimize the amount of materiel deployed to the operational area if those capabilities can be provided by the host nation. Another important preparation tool is operational contracting to acquire support that would otherwise necessitate additional military presence. Army prepositioned stocks are essential for the projection of forces, reducing deployment times and ensuring operational reach. They support deploying and deployed forces until lines of communication can be established and operational aerial ports and seaports are available. One of the missions of the modular sustainment brigade is to facilitate theater opening in preparation for force deployment.

Sustainment builds combat power and gives Army forces their reach and endurance. Endurance stems from the ability to maintain, protect and sustain forces regardless of how far away they are deployed, how austere the environment or how long landpower is required. Endurance is enabled by an Army distribution system that provides forces with continuous sustainment.

The distribution system is inherently linked and supported by joint partners and generating-force organizations and is facilitated by a contracting system that supports the capacity to move personnel and materiel throughout the theater.

Also addressed in FM 4-0 is another aspect of endurance—the ability of forces to reconstitute in theater. Reconstitution is generally performed when it is necessary to bring a unit back to combat effectiveness in order to minimize the loss of operational tempo.

Operational reach is paramount for commanders to achieve their desired end state. Forces must possess the necessary operational reach to establish and maintain conditions that define success. Commanders and staffs increase operational reach through deliberate, focused operational design and the necessary sustainment to facilitate endurance. Finally, FM 4-0 addresses the roles of intermediate staging bases and forward operating bases, which serve as locales from which forces are projected or supported.

Field Manual 4-0 *Sustainment* covers the critical role sustainment plays in supporting Army forces. Sustainment builds combat power and is integrated with the operations process and supports full spectrum operations.

From a broad perspective, FM 4-0 codifies the doctrine for Army generating-force organizations, which play pivotal roles in building and maintaining Army readiness and combat power. Modular operating-force sustainment organizations maintain combat power and give Army forces their reach and endurance. FM 4-0 will serve the Army well for years to come.

ARFORGEN:
Maturing the Model, Refining the Process

By GEN Charles C. Campbell

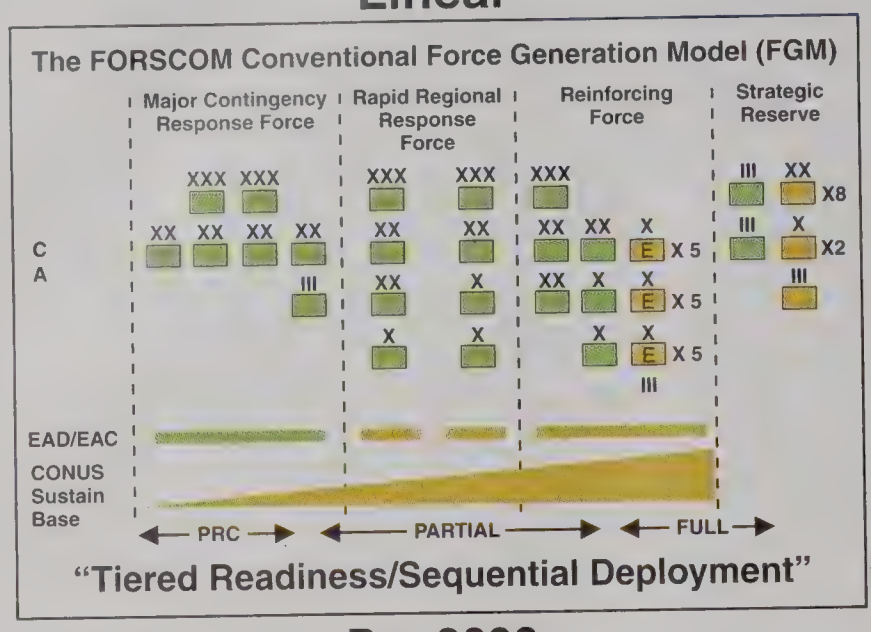
In less than three years, the Army has successfully implemented the greatest transformation to its force generating system since the beginning of the Cold War. The impetus for this change was primarily driven by the complex nature of today's threat, the reality of preparing forces on compressed time lines for extended deployments and the imperative to preserve the all-volunteer force.

While we are in an era of persistent conflict, we continue to generate forces as the global demand for land forces exceeds the available supply. Despite this, our nation and the combatant commanders expect the Army to produce a sustained supply of trained and ready forces—and, since 2003, we

Homeward-bound U.S. soldiers wait to board a C-17 Globemaster III at Joint Base Balad, Iraq. To meet the demand for a sustained supply of trained and ready forces, the Army initiated the rotational Army force generation in 2006.

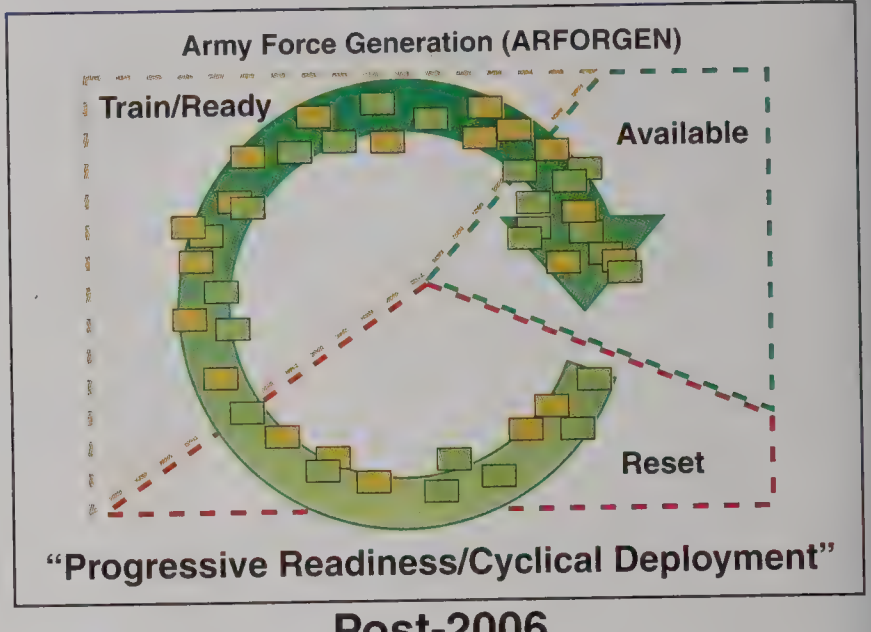
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Rotational



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have met those expectations. This demand for forces, along with the conversion to modular formations and our use of the reserve components as an operational force on a recurring basis, required the Army to adapt its force generation model. In 2006, we replaced the Cold War-era linear model based on tiered readiness and sequential deployment with a 21st-century rotational model based on progressive readiness and capable of cyclical deployments. We call this force generation model and process Army force generation (ARFORGEN), and it applies to both active and reserve component units.

The Need for a New Approach

The demands of conducting continuous operations over the past eight years have changed how the Department of Defense and the Joint Staff plan and manage the global commitment of forces. Early in 2002, partially in recognition of the protracted nature of today's contingency operations, the Secretary of Defense opted to depart from the Joint Operations Planning and Execution System—the Army's legacy system optimized for sequential deployment as part of a one-time flow of forces overseas. After several years of sourcing units for global deployment in an improvisational manner, the Joint Staff adopted a system that is now formalized as the Global Force Management Allocation Process.

In recognition of the uneven, but continuous, global demand for capabilities, the Army made the decision to adapt its force generation construct into one optimized to deploy trained and ready forces on a rotational basis. In 2005, the Chief of Staff of the Army approved the ARFORGEN model for concept development. A year later, the Secretary of the Army approved the implementation of ARFORGEN. Since then, ARFORGEN has proved to be a flexible force generation construct. For instance, reinforcement of Multi-National Force-Iraq in early 2007 involved readying the five brigade combat teams, a combat aviation brigade, a complement of combat support units, and a division headquarters on a greatly accelerated time line that could not have been accomplished as effectively with the legacy system. Without ARFORGEN, we would have bulled our way forward, albeit more slowly, with greater friction and with less alacrity. The success of synchronizing the Army systems to accomplish this surge of forces while simultaneously sustaining already deployed forces is without parallel in the Army's recent history.

Maturing the Model, Refining the Process

ARFORGEN involves a structured progression that builds unit readiness over time, resulting in recurring periods of availability of trained, ready and cohesive modular units to meet both combatant command and Army requirements. ARFORGEN is both a model and a process. The Department of the Army views ARFORGEN as a "supply based model" in order to inform a corporate approach to programmatics and as a methodology to communicate force generation requirements. Forces Comman

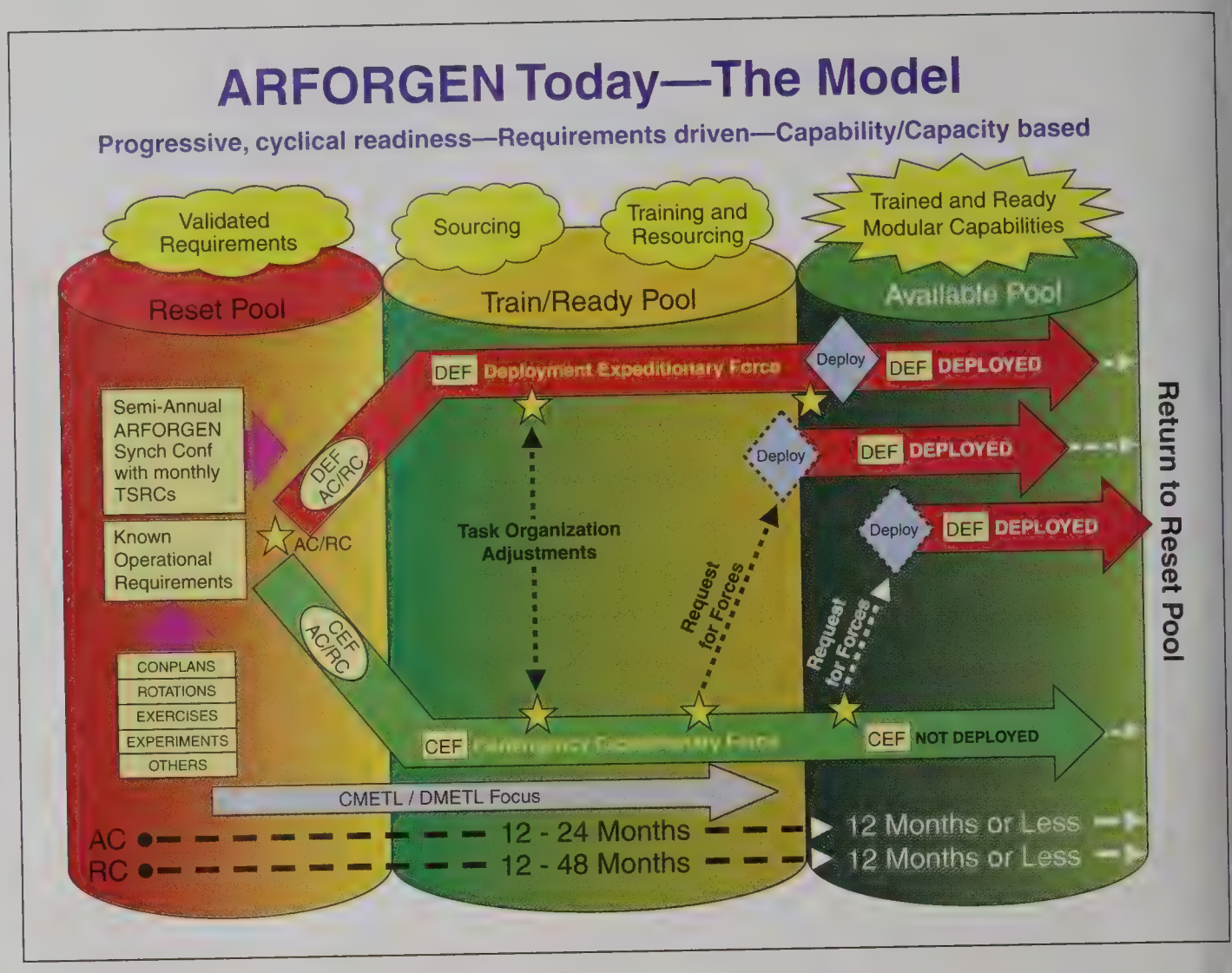
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*GEN **Charles C. Campbell** is the commanding general, U.S. Army Forces Command (FORSCOM). When FORSCOM is mobilized for combat operations, he is responsible for the oversight, staffing, training and equipping of 750,000 active duty, Reserve and National Guard soldiers.*

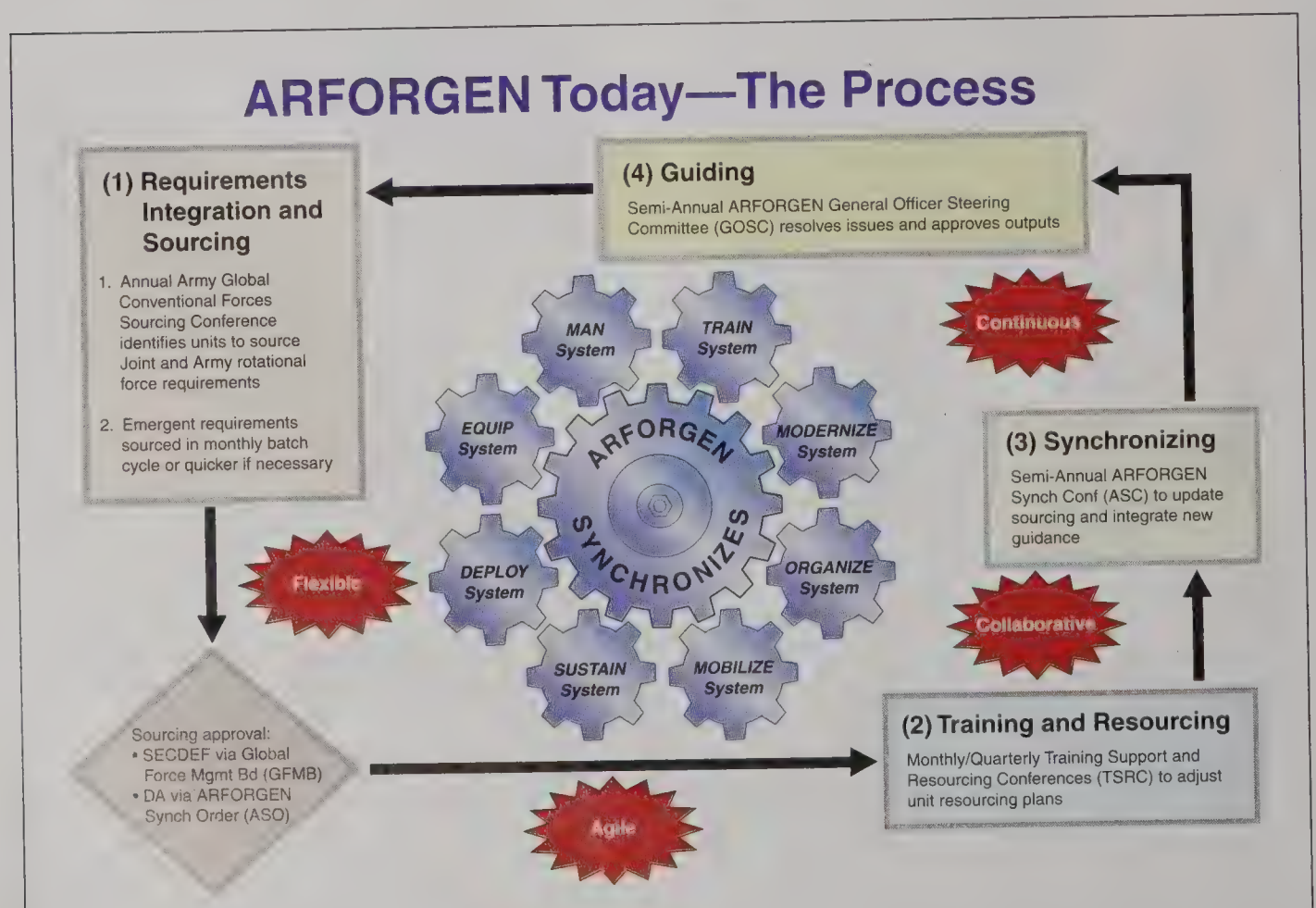

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(FORSCOM), however, views ARFORGEN as a "demand-based process" to systematically build unit readiness on requirements identified by both the combatant commanders and the Army. Neither the ARFORGEN model nor the process has remained static. Throughout the first three years of implementation, the Army has continually matured the model and refined the process.

Although adjustments to the ARFORGEN model have been incremental, there are several notable improvements since the approval of ARFORGEN. A significant maturation of the model occurred when the Chief of Staff of the Army directed that *reset* become a discrete element of ARFORGEN; FORSCOM—the Army's manager for ARFORGEN—adjusted the force pools to designate *reset* as a stand-alone pool.



Today the model is composed of three force pools through which each unit progresses during its ARFORGEN cycle. These pools are: *reset*, a period in which the unit undergoes soldier-family reintegration, staffing and equipping regeneration, and limited individual training, which provides a unit capable of performing civil support operations; *train/ready*, characterized by collective training and the progressive build-up of readiness to accomplish less complex missions while ultimately achieving a capability to conduct full spectrum operations; and *available*, a period during which the unit is at its highest state of readiness and is either deployed or is ready to deploy worldwide to conduct full spectrum operations.



To make the model operational and to convey ARFORGEN complexities we refined our understanding of ARFORGEN in order to view the process more broadly as a "process of systems." In other words, we use ARFORGEN to orchestrate the Army's systems. The Army has a system for organizing, staffing, equipping, training, deploying, sustaining, modernizing and mobilizing—these systems are not, in themselves, self-synchronizing. Even within themselves, the components of the individual system



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are often not optimized to support ARFORGEN. Without the maturation of the model and the refinement of the process, we could not prepare and deploy formations at the pace at which today's global demand is driving the Army.

FORSCOM has refined the ARFORGEN process in a number of additional ways. As a result of efforts we undertook to rationalize transformed command-and-control relationships within the modular force, we formally recognized the central role of senior commanders on our installations with regard to ARFORGEN. As multiple, complex and time-sensitive ARFORGEN activities unfold on installations, senior commanders integrate and synchronize the outputs of the systems previously mentioned to achieve unit readiness.

Acknowledging the shortcomings of our initial synchronization methodology, which was generally episodic in execution, FORSCOM developed and adopted a continuous approach. Rather than consolidating requirements in batches twice a year, ARFORGEN is now orchestrated throughout the year to synchronize the Army systems for a two-year period—the first "execute" year and the second "verify" year. To do this and to more effectively account for unit feedback and the dynamic sourcing environment, FORSCOM established four forums: Global Conventional Force Requirements Sourcing Conference, a body that identifies units to source Joint and Army rotational force requirements; Training Support and Resourcing Conference, which adjusts unit training and resourcing plans; Synchronizing, semiannual conferences to update sourcing and to integrate new guidance; and Guiding, a general officer steering committee that resolves issues and approves outputs.

The ARFORGEN process has demonstrated that it is sufficiently capable of meeting the spectrum of combatant commander demand. Whether we produce trained and ready forces at a rate that Army leadership considers sustainable, add forces to meet a spike in demand or undertake exceptional measures to meet an extreme circumstance, we can, given sufficient resources, accomplish the force generation required. Our experience of the last two years validates our vision of ARFORGEN as a model and process that is:

- Flexible—able to accommodate the full spectrum of demand.
- Agile—able to realign resources to meet changing requirements.
- Collaborative—inclusive, transparent and providing multiple opportunities for units to identify operational challenges for resolution.
- Continuous—able to make decisions in time to ensure resources are available as required to build unit readiness.

Progressively Building Readiness

ARFORGEN is a "supply-based model" and a "demand-based process," but it is neither exclusively a "model," nor only a "process." It is the way the Army progressively builds readiness over time and includes every unit in the Army—active, Army National Guard and U.S. Army Reserve. Through ARFORGEN, the Army can provide a predictable number of brigade combat teams and supporting formations to the *available* pool that can either stand ready for contingencies or can deploy for a specified mission.

Finally, the Army has undertaken an enterprise approach by aligning effort to four core enterprises—readiness, human capital, materiel and services/infrastructure—that focus on functional support of the ARFORGEN process. Within this approach, Forces Command serves as a greater part of the Readiness Core Enterprise responsible for the aforementioned synchronization and integration. In partnership with the Department of the Army and the other core enterprises, the Readiness Core Enterprise remains committed to improving ARFORGEN. Despite the fact that the model has proved sound, our processes have only enabled us to meet the combatant commanders' demand for forces effectively, without the sustainable efficiency required for persistent conflict. While ARFORGEN has enabled us to generate quality ready forces on time, we have not always done so in the most affordable manner. To enable an enterprise approach, the entire Army—the generating force and operating force—must undertake the necessary institutional adaptations to generate forces more efficiently, making the best of available resources. ★

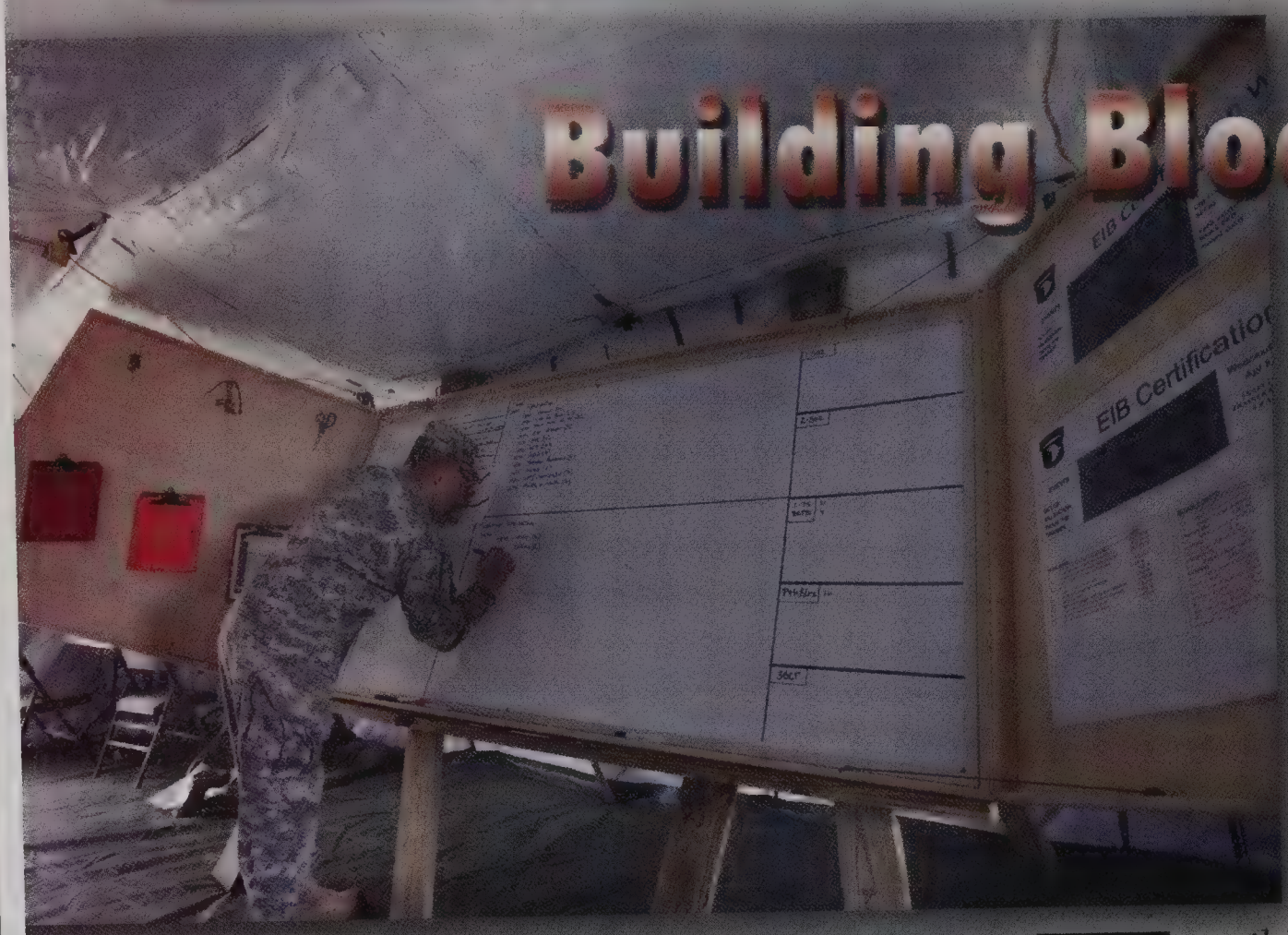
Maturing the Model—Refining the Process

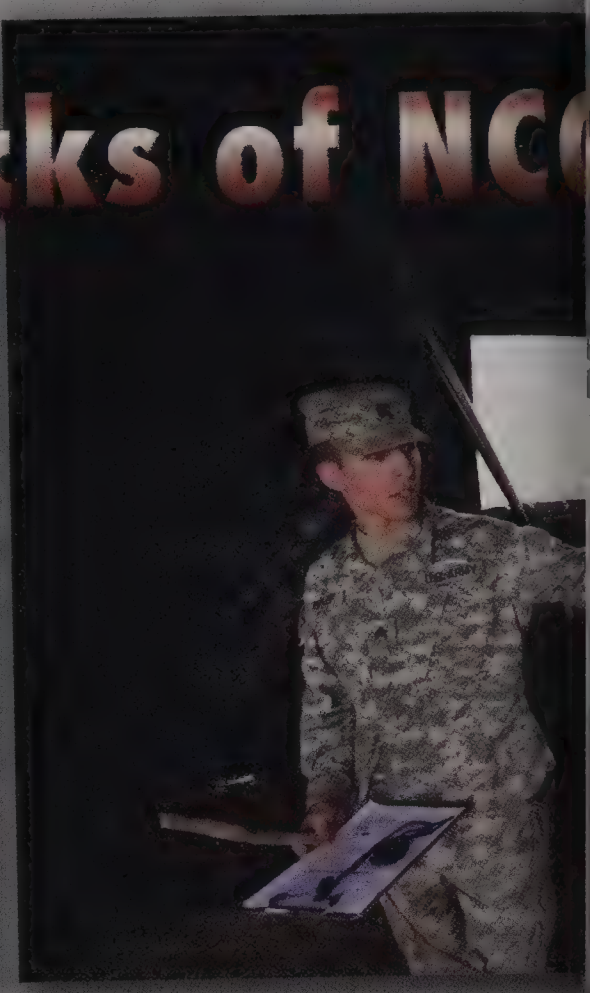
ARFORGEN IS	ARFORGEN IS NOT
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• A process of systems	• An independent process
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YEAR OF THE NCO

Building Blocks of NCO

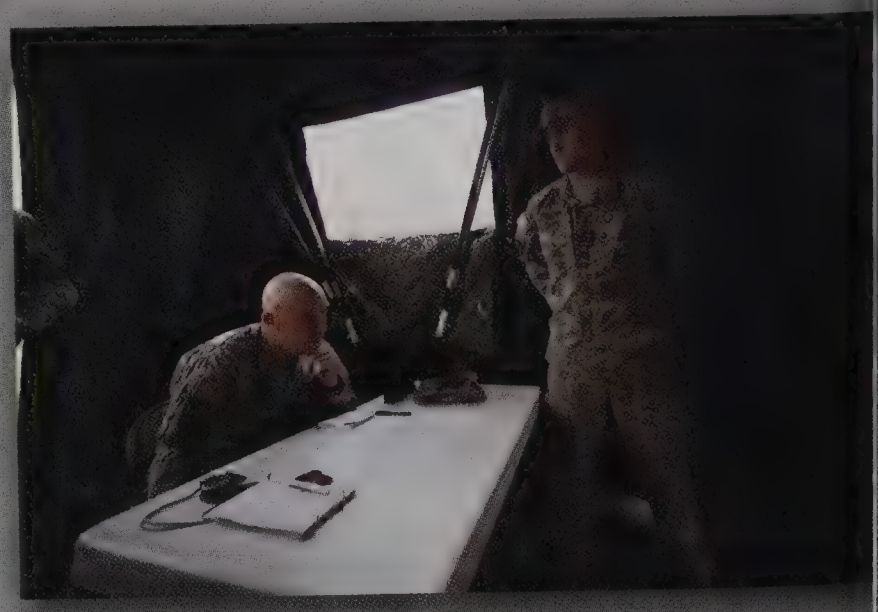






Two things were happening simultaneously at the 2nd Brigade Combat Team (BCT), 101st Airborne Division (Air Assault): preparation for the Expert Infantryman Badge (EIB) qualification test and the brigade NCO and soldier of the quarter competition.

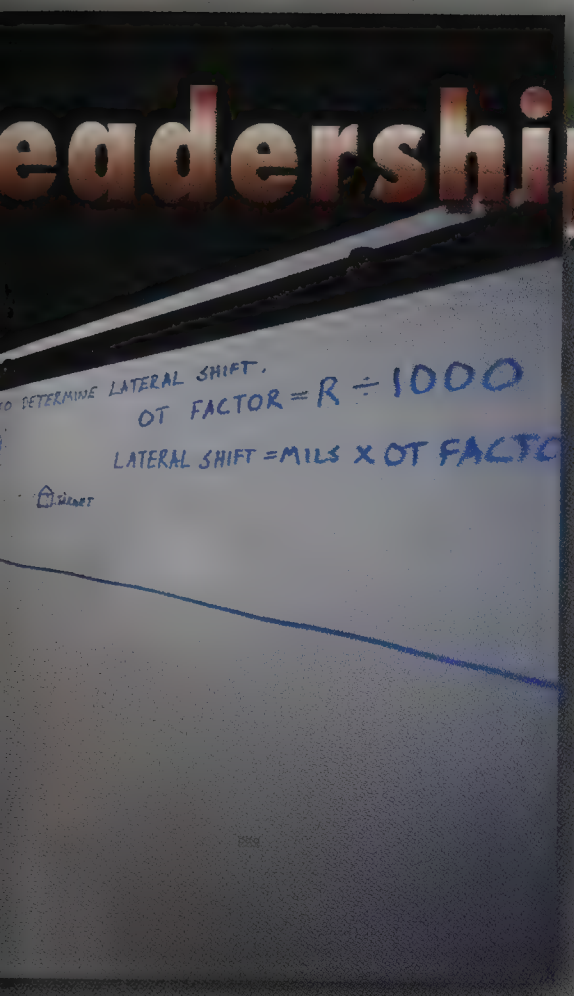
Both center on individual study and achievement; however, they are also fundamental elements in developing noncommissioned officers at the unit level. In addition, both are run by senior NCOs in the unit.



Clockwise (this page) from top left, SGM Jaime Guarino, operations sergeant major for the 2nd Brigade Combat Team (BCT), 101st Airborne Division (Air Assault), sets up the event tracking board for the 2nd BCT's Expert Infantryman Badge (EIB) certification. SGT Daniel Becker briefs the 2nd BCT's EIB committee during lane certification. Sitting at a lane testing table, CSM Scott C. Schroeder, the 2nd BCT's command sergeant major, makes comments as the EIB committee conducts lane certification. CSM Kevin Benson, 2nd Battalion, 502nd Infantry, crouches in the door of a testing tent and listens as a lane noncommissioned officer in charge (NCOIC) briefs the EIB committee.

Photographs by Dennis Steele

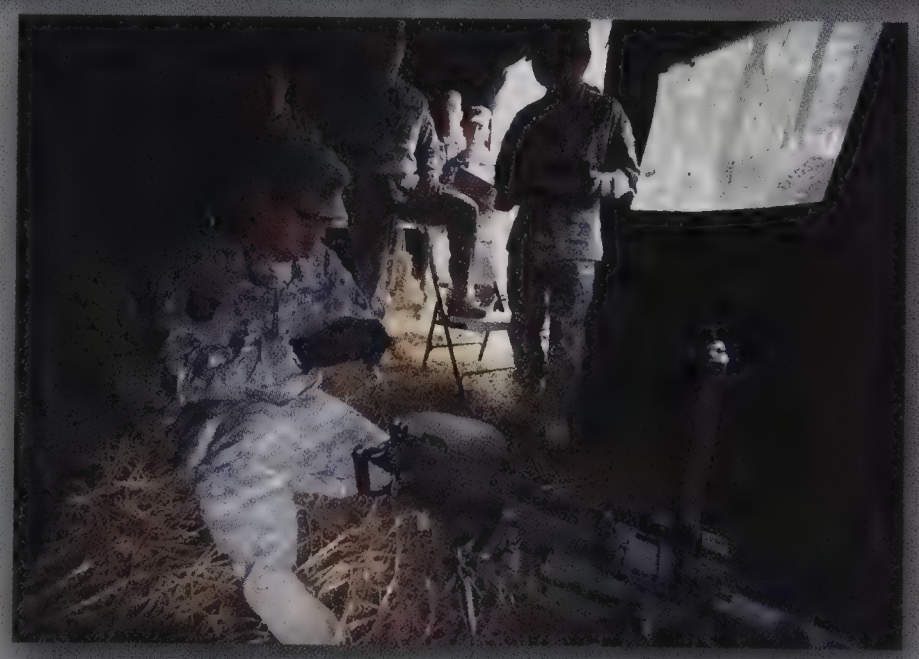
eadership Development





Although EIB qualification is, of course, for nfantrymen, similar qualification tests are eld in other branches, and soldier and NCO ompetitions are held routinely throughout he Army. They are building blocks in devel- ping NCO leaders.

In the case of the 2nd BCT (502nd Infantry egiment), EIB qualification had not been held almost six years because of operational empo. Before combat deployments to Iraq nd Afghanistan, EIB qualification had been annual event. Knowing its importance, senior





Top, SFC Michael Calderaro, a lane NCOIC, points out a feature on his lane to CSM Schroeder (right). Center, SGT Vicente Herrera goes through the M2 machine gun headspace and timing procedure as it will be tested on his EIB lane. Bottom, SFC Christopher Givens (foreground) explains his lane procedures to the EIB committee.

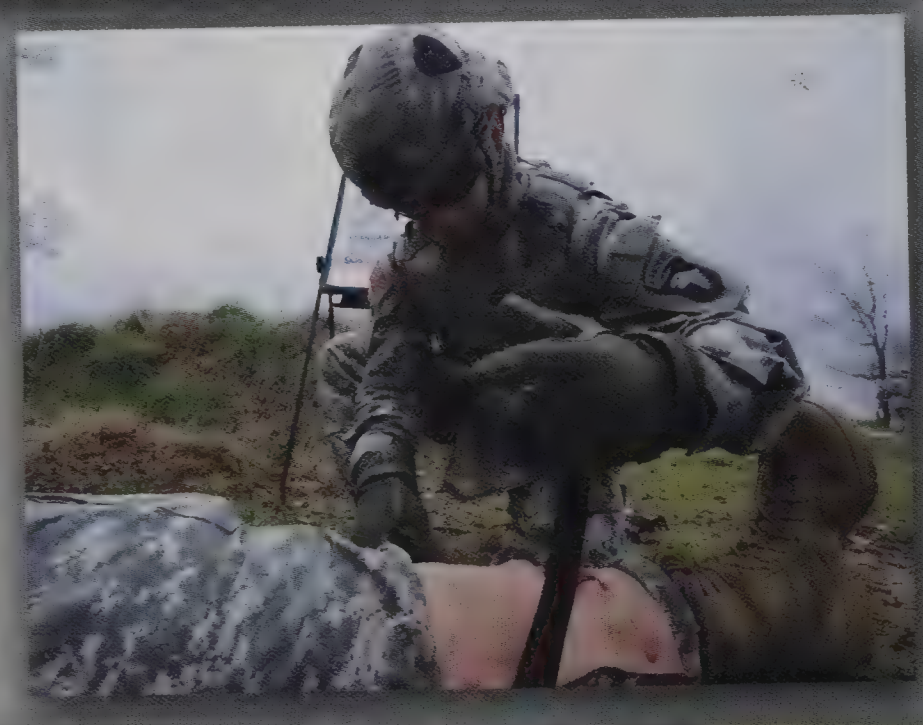


SGT Kyle Stout radios a "nine line" medical evacuation message during the 2nd BCT's soldier and NCO of the quarter competition.

NCO leaders in the brigade began planning to renew the event during the brigade's last deployment to Iraq. The brigade had continued the soldier and NCO of the quarter competitions throughout its deployments, often bringing in soldiers directly from patrol operations to compete.

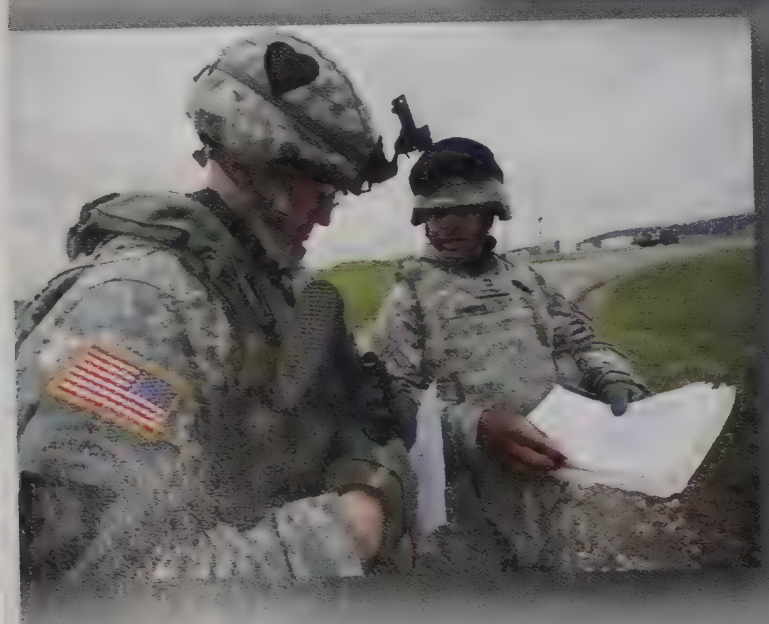
The brigade command sergeant major, CSM Scott C. Schroeder, was delegated by the commander to oversee both events, but every command and staff sergeant major in the brigade was directly involved in one or the other.

Leading the group of sergeants major on the EIB committee, which was validating the training lanes at the EIB course, CSM Schroeder said that EIB qualification "lays the foundation for collective training" and explained that it is linked to promotion for senior infantry NCOs. "It can make a difference at centralized promotion boards," he said. It tests individual proficiency in basic infantry tasks, and it tests the EIB-qualified NCOs in soldiers' chains of command in preparing and mentoring soldiers for the event.



SGT Scott Foote applies a tourniquet to a mock victim during the medical testing portion of the competition.

SFC Jasper Harris, the 2nd BCT network operations NCOIC, explains tasks, conditions and standards of the communications test to CPL Mike Haskell.

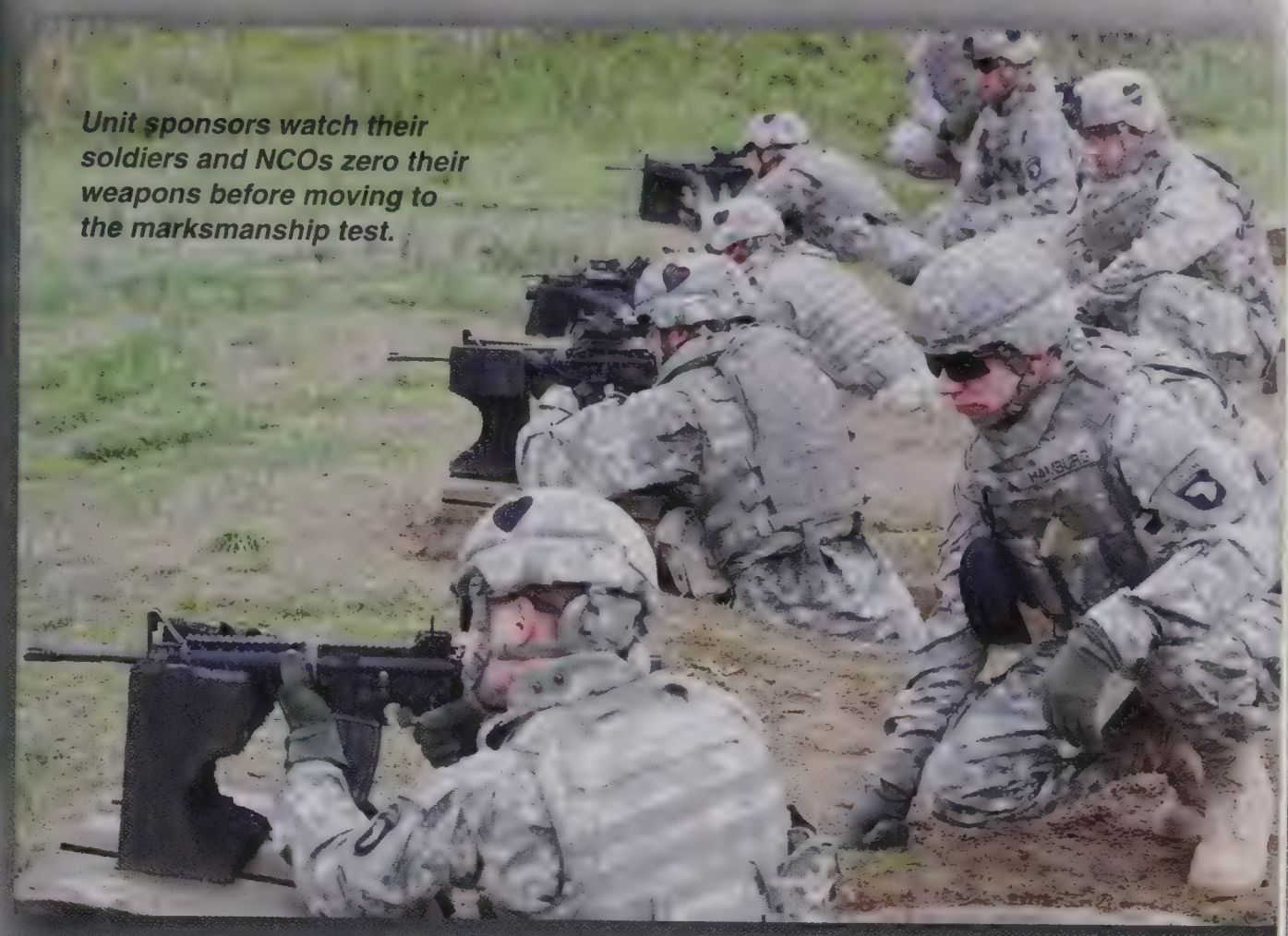




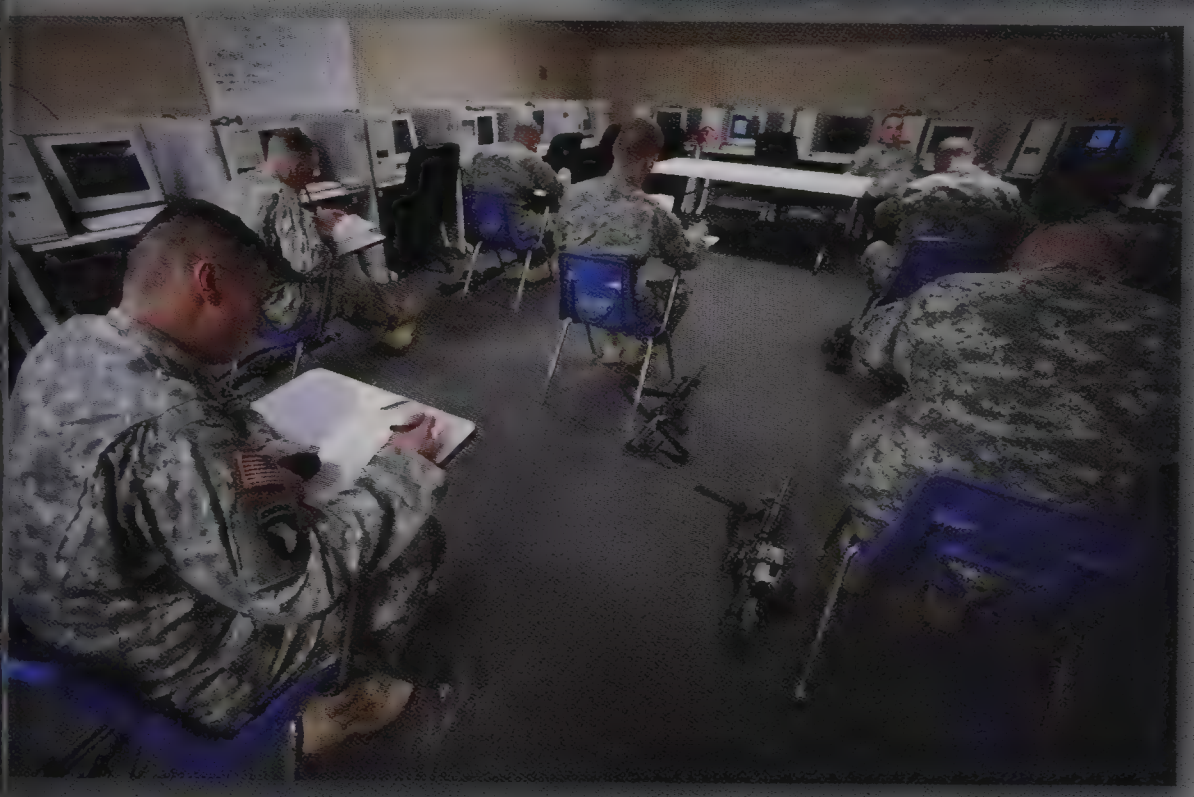
SPC Christopher Rowlands fires his M4 carbine during the marksmanship portion of the 2nd BCT's soldier and NCO of the quarter competition.



competitor checks his weapon's zero.



Unit sponsors watch their soldiers and NCOs zero their weapons before moving to the marksmanship test.



Competitors take a written examination during the 2nd BCT's soldier and NCO of the quarter competition.

Similarly, the soldier and NCO of the quarter competition tests individual proficiency in a number of tasks and the NCO chain of command in preparing individuals. CSM Schroeder told soldiers competing for the honor that the event is important to all of them, regardless of whether or not they win. "It makes you a better soldier," he said.

CSM Wayne P. St. Louis, command sergeant major of 2nd Brigade Special Troops Battalion and presiding as the president of the soldier and NCO of the quarter selection board, said, "These types of boards give soldiers confidence in their abilities. Preparing for the board forces them to gain knowledge, and it gives them pride in their units. For the winning NCO, it gives him expert power—credibility. It is easier to motivate soldiers because you lead by example." ★



The 2nd BCT's soldier and NCO of the quarter board checks the uniform and military bearing of SGT Kyle Stout.

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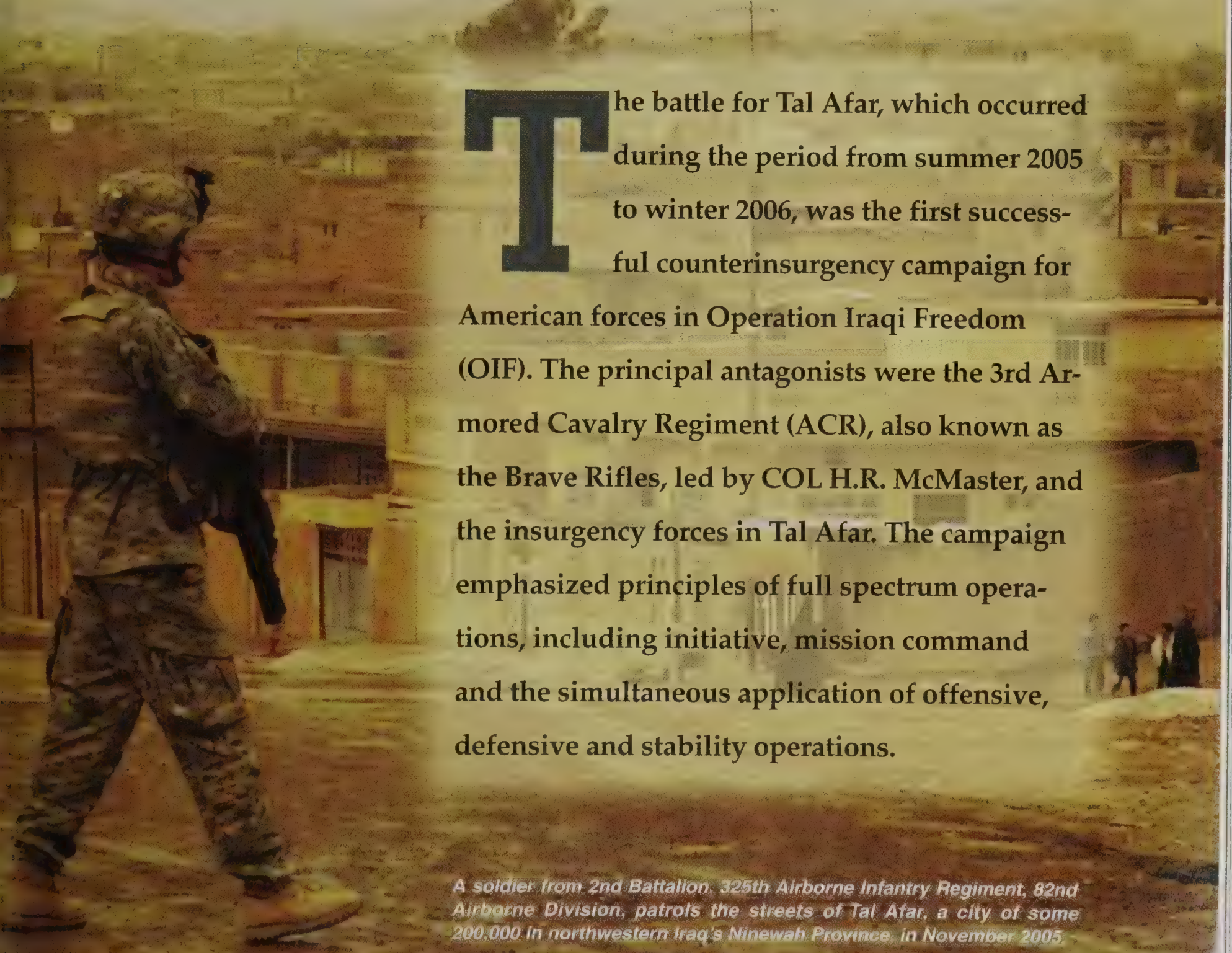
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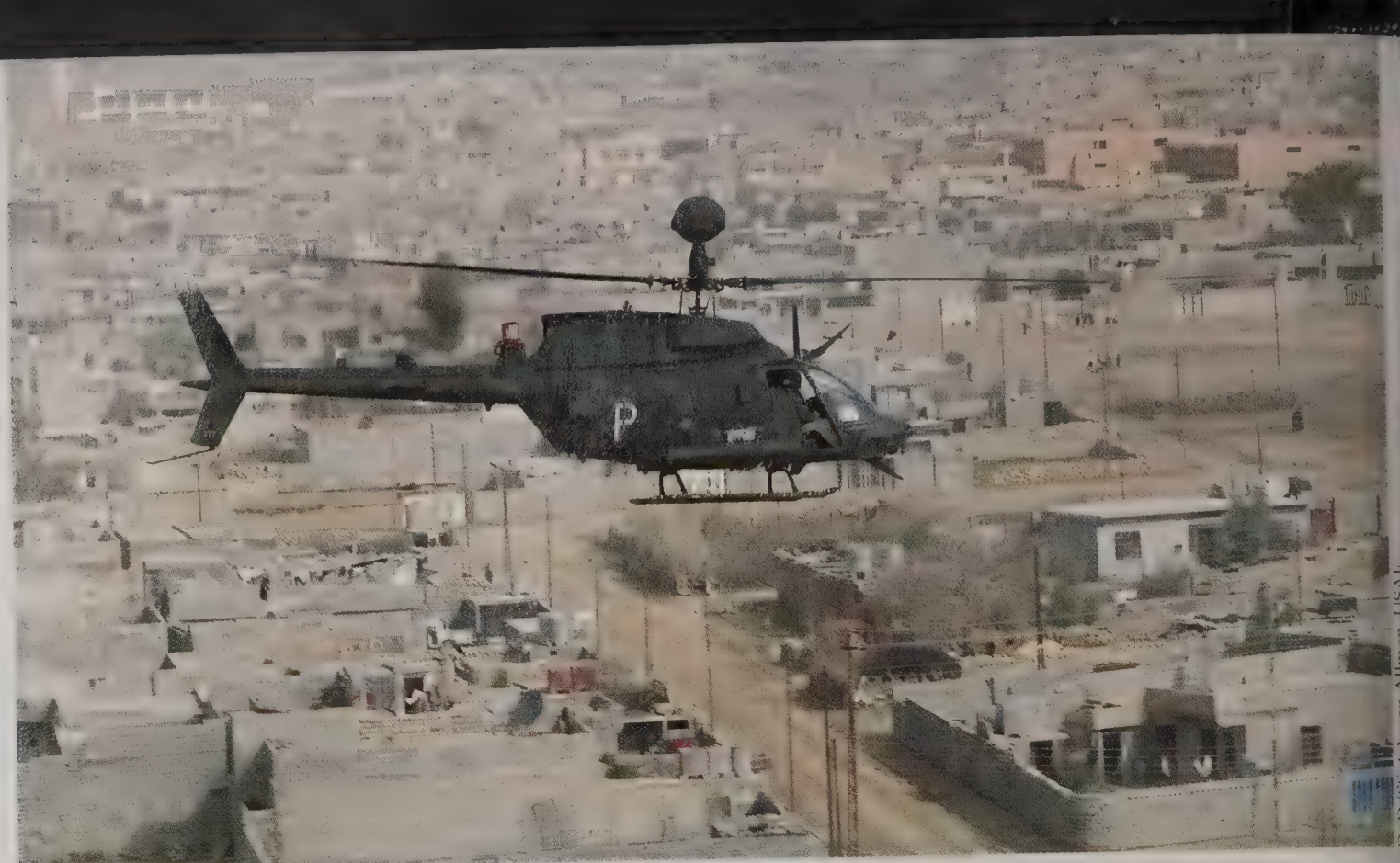
Tal Afar 2005: Laying the Counterinsurgency Groundwork

By MAJ Jay B. Baker



The battle for Tal Afar, which occurred during the period from summer 2005 to winter 2006, was the first successful counterinsurgency campaign for American forces in Operation Iraqi Freedom (OIF). The principal antagonists were the 3rd Armored Cavalry Regiment (ACR), also known as the Brave Rifles, led by COL H.R. McMaster, and the insurgency forces in Tal Afar. The campaign emphasized principles of full spectrum operations, including initiative, mission command and the simultaneous application of offensive, defensive and stability operations.

A soldier from 2nd Battalion, 325th Airborne Infantry Regiment, 82nd Airborne Division, patrols the streets of Tal Afar, a city of some 200,000 in northwestern Iraq's Ninewah Province, in November 2005.



A U.S. Army OH-58D Kiowa helicopter from the 3rd Armored Cavalry Regiment (ACR) conducts a combat air patrol over the ancient city of Tal Afar in February 2006.

DOD photo by Master Sgt. Jason Allman, USAF

Strategic Setting

Tal Afar is an ancient city of approximately 200,000 people in northwestern Iraq's Ninewah Province, near the Syrian border. It figured prominently in Abu Musab al-Zarqawi's strategy of fomenting sectarian violence to undermine the American effort in Iraq due to its ethnic makeup of 75 percent Sunni and 25 percent Shiite Turkmen. Tal Afar had been cleared of insurgents once before, in September 2004, but the United States did not leave an adequate force to maintain security. Insurgents reclaimed Tal Afar within a month, besieging police stations and forcing terrified residents to flee the city or retreat into tribal compounds. By November 2004, Tal Afar had replaced Falluja as a center of the insurgency.

Sunni nationalists and extremists known as *Takfiri* had aligned to seize control of the city and use it as a base for operations. They employed brutal violence to control the populace; methods included leaving headless corpses lying on city streets for days. The Shiite police force was little better than a sectarian death squad, likewise leaving a trail of bodies as a vicious cycle of fear and sectarian violence choked the life out of the city. Meanwhile, Tal Afar became a transit point for foreign fighters arriving from Syria and a support base and sanctuary for insurgents to organize, train and equip insurgent cells throughout northern Iraq.

As a U.S. Central Command staff officer, COL McMaster observed in 2003 that an insurgency was developing in Iraq. Upon taking command of 3rd ACR in 2004 following its redeployment from Operation Iraqi Freedom I, COL McMaster implemented a training strategy based on classic counterinsurgency doctrine, including cultural training and emphasis on intelligence, information operations and civil affairs. Fortunately, two of the 3rd Armored Cavalry Regiment's squadron commanders, LTC Chris Hickey and LTC Greg Reilly, had previously commanded in OIF-I and applied the lessons learned from their experiences with the theoretical experience of COL McMaster to plan and implement a tough and realistic counterinsurgency training program. The Brave Rifles shed the force-on-force training scenarios of the National Training Center and trained instead in realistic scenarios with soldiers and Arab-Americans playing the roles of Iraqis. This training would pay tremendous dividends during OIF-III.

Had American forces allowed insurgents to retain control of Tal Afar, they would have ceded the initiative to the enemy in northern Iraq and handed them an important propaganda victory. The Brave Rifles did not anticipate orders to "clear and hold" in Tal Afar, but there was no unit better prepared to conduct a counterinsurgency campaign in Iraq in 2005.

Tactical Situation

Mission. At the time the 3rd ACR received its orders "clear and hold" was not a core doctrinal concept, and guidance from senior civilian and military leaders was lacking. Tal Afar was critical to the insurgents' strategy to incite an ethnic and sectarian civil war in Iraq. Having reclaimed the city once before, the insurgents had the advantage.

Equipment/effects. The Brave Rifles carried nearly a full division's firepower: the M1A2 Abrams main battle tank, the M3A2 Bradley cavalry fighting vehicle, artillery including M1064A3 self-propelled 120 mm mortars and six M109A6 Paladin 155 mm self-propelled howitzers, M1114 Humvees with mounted weapons, and organic aviation assets including AH-64D Apache Longbows, OH-58D Kiowas and UH-60 Black Hawks. Dismounted cavalry troopers carried M4 carbines, M16 rifles, M249 squad automatic weapons and M240B m

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MAJ Jay B. Baker, M.D., *U.S. Army, served as regimental surgeon of the 3rd Armored Cavalry Regiment in Tal Afar, Iraq, from 2005 to 2006. He is a board-certified emergency physician currently serving as the chief of the Emergency Department at the 121st Combat Support Hospital in Seoul, Republic of Korea. He received his medical degree from the University of Southern California in 2000 and completed his emergency medicine residency at Los Angeles County Medical Center in 2004. An earlier version of this article won the Letterman Award for best battle analysis at the Army Medical Department's Captain Career Course in September 2008.*



Crews and M1 Abrams tanks attached to the 3rd ACR, also known as the Brave Rifles, maneuver in the streets as they conduct a combat patrol in Tal Afar in February 2005.

hine guns, M14 sniper rifles, M500 12-gauge shotguns, and 0 mm and 80 mm mortars. The insurgents' weapons included AK-47 Kalashnikov rifles, rocket-propelled grenades, nortars, rockets and various types of improvised explosive evices (IEDs), including triple-stacked and shaped charges. he insurgents employed their weapons asymmetrically, terorizing the local population into passive support through idnappings, beheadings and public executions as well as xploiting Tal Afar as a centerpiece of their propaganda campaign following the fall of Falluja. The 3rd ACR possessed uperior equipment, but the insurgents held the advantage effects.

Terrain and weather. The city of Tal Afar consisted of a confounding variety of urban terrain, ranging from modern ultistory buildings, garages and small alleys to districts with ancient caves and subterranean catacombs. The insurgents held the advantage.

Troops available. The regiment's 2nd (Sabre) Squadron received the primary mission for Tal Afar. Sabre Squadron took with it three Bradley troops, two Abrams troops, a howitzer battery, a combat engineer company, a Kiowa troop and an operationally controlled Special Forces team, and it was paired with an Iraqi army brigade and the Iraqi police force. The unit requested additional combat forces and received 1st Squadron assets throughout operations in Tal Afar as well as control of the 2nd Battalion, 325th Airborne Infantry Regiment, 82nd Airborne Division, from September to December 2005. The insurgents' force was estimated as mustering between 500 and 1,000 men. The magnitude of American and Coalition forces gave the 3rd ACR the advantage.



SGT David Schafroth, 3rd ACR, conducts a combat patrol in Tal Afar in February 2006. The campaign to reclaim the city emphasized principles of full spectrum operations, including the simultaneous application of offensive, defensive and stability operations.

Time. Many local recruits grew up in the city and consequently knew its environs intimately. Having controlled the city since November 2004, the insurgents had the advantage of time.

Civil considerations. The 3rd ACR recognized the long-term importance of securing the civilian population and gaining their support for the Iraqi government. The insurgents demonstrated their true intentions to the people of Tal Afar by their brutality but retained a powerful stranglehold on the city through intimidation and fear. The 3rd ACR had the advantage—if it could learn to leverage it.



Soldiers with the 3rd ACR conduct a combat patrol in Tal Afar in February 2006. The insurgents' brutality and intimidation of the civilian population complicated the Brave Rifles' mission.

The Battle for Tal Afar

Sabre Squadron moved north from Baghdad to western Ninewah Province in April 2005, to be joined subsequently by the rest of the regiment the next month, and was struck by three IEDs on its first convoy into the area. Fortunately there were no casualties, but how fully the insurgents controlled the city was sobering.

Before transferring authority from the outgoing unit, Sabre Squadron suffered its first casualties when an IED composed of six or more stacked 122 mm artillery rounds exploded beneath a Stryker, killing four soldiers. The insurgents had welcomed the Brave Rifles to ancient Ninewah.

Early in May, Sabre Squadron began to improve security by placing Iraqi army patrol bases along Alternate Supply Route Santa Fe, a vital artery between Syria and Mosul, to provide overwatch and security. The result was an immediate decrease in IED attacks. Meanwhile, Sabre Squadron's commander, LTC Hickey, began to study the local power structure by spending most of his time each week visiting Tal Afar's Sunni and Shiite sheikhs. By the end of the month, the unit developed a clearer picture of the situation in Tal Afar: The insurgent centers of gravity were the Sarai and Qadisiyah Districts, including the city's hospital. More fundamentally, LTC Hickey began to understand the reasons for the popular alienation that sustained the insurgency, which included tacit local support, sectarian retaliation and persistent ill will from prior American operations in Tal Afar. He also observed that low rates of education and literacy and a 75 percent unemployment rate made the population especially vulnerable to insurgent subversion.

COL McMaster and LTC Hickey reasoned that changing the environment in Tal Afar would be more productive and enduring than continuing a search-and-destroy mis sion against "whack-a-mole" bands of insurgents. The 3r ACR sought to drive a wedge between the Sunni nationa ists and the *Takfiris* by adjusting its information operation to emphasize that they were intended to help the Sunnis– not punish them. Fair and respectful treatment of de tainees as well as rigorous adherence to detainee proces ing standards persuaded fence-sitters to join the Coalitio instead of the insurgents. Sabre Squadron also exploite intelligence from new informants—for instance, conduc ing an operation in June that killed 20 insurgents and d tained 23 high-value targets.

The 3rd ACR established joint operations from the sta with its counterpart, the Iraqi army 3rd Division, and m tually determined how to deploy forces throughout th area of operations. A strong team was chosen from the re iment to facilitate this vital partnership and was placed the Iraqi 3rd Division headquarters. This included oper tions, intelligence, communications and logistics as well liaison staff functions. In addition to the already embedde military training teams, this was essential to executing t

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Soldiers from the 3rd ACR conduct cordon and search operations in Bi'aj, Iraq, once a rest stop for Sunni Arab insurgents traveling to the northern cities of Tal Afar and Mosul in January 2006.

scale of coordination that the regiment intended.

By the close of August, conditions were right to flush the main body of insurgents from Tal Afar. Sabre Squadron had executed more than 1,500 reconnaissance patrols, 111 cordon and searches, and 46 raids, resulting in the destruction of more than 900 enemy weapons, including artillery pieces, and captured more than 200 insurgents while killing more than 130. Simultaneously, 1st Squadron secured the border with the Iraqi border defense forces by such measures as destroying a chain of safe-house locations stretching from Syria to Tal Afar. American forces also constructed a 12-kilometer berm around the city to control traffic in and out of the population center and deny maneuverability to the insurgents. Most critically, perhaps, the constant diplomacy of LTC Hickey with the local tribal and city leaders and COL McMaster with Tal Afar's mayor, Najim Abdullah al-Jabouri, and the Iraqi army 3rd Division's MG Khorsheed Saleem al-Dosekey had convinced the local leaders that the 3rd Armored Cavalry Regiment would remain in Tal Afar following the operation to build security forces and infrastructure and help the local government navigate the bureaucracy of the Iraqi government.

More than 3,000 American and 5,500 Iraqi soldiers and policemen amassed outside the city in preparation for the assault, while the coming offensive was publicly announced and thousands of people vacated the city. The largest single operation in the battle for Tal Afar, Operation Restoring Rights, kicked off with a three-day assault on the Sarai neighborhood as Sabre Squadron descended upon the insurgents' stronghold from both north and south while 1st Squadron formed an anvil of force on the city's west side. Fighting was occasionally fierce and many buildings were damaged, but it wasn't close to the destruction of Falluja nearly a year earlier. By the end of the combat phase, the 3rd ACR had lost only two troopers compared to insurgent losses of 150 killed and more than 600 detained.

The efforts of both the Iraqi army and the Iraqi police were essential to the success of Operation Restoring Rights. The Iraqi army provided two brigades of combat power, received the full attention of division assets and leadership, and executed the same mission and tasks as U.S. forces. The Mosul chief of police participated in planning and assigned an effective leader as Tal Afar chief of police. During the clear phase, the police conducted population control, detainee operations, intelligence gathering and checkpoint operations. A primary reason the Iraqi army and Iraqi police were successful was that they had strong leaders who cooperated with one another and did not let sectarian differences or parochial concerns interfere with the mission. U.S. forces fostered this cooperation through combined rehearsals and situation updates, intelligence sharing and regular meetings. Sabre Squadron's leadership was highly effective in promoting information sharing and regular face-to-face contact that helped the Iraqi army and Iraqi police work together.

True to their promise, 2nd Squadron remained in Tal Afar to maintain security following combat operations. The newly arrived 2nd Battalion, 325th Airborne Infantry Regiment (White Falcons), 82nd Airborne Division, received responsibility for the Sarai and Hassan Qoi Districts for the next four months. Both Sabre Squadron and the White Falcons established company-sized patrol bases in the city, no longer commuting to the fight, and became neighbors with the people they were tasked to protect. LTC Hickey collocated his squadron headquarters with those of the Tal Afar city police and Sabre's partner Iraqi army brigade in the old Ottoman fortress in the city's center. A joint operations center was established there that included civil, military, police, fire and other representatives, offering improved access for citizens willing to share information.

With security more firmly established, rebuilding Tal Afar could begin in earnest. Initiatives included development of essential services, education projects, police stations, parks and other reconstruction projects. LTC Hickey stated in *Military Review:*

> Restoring the community's faith in the hospital was one of the keys to our strategy of restoring confidence in the Iraqi government. The other keys were restoring confidence in the city government, getting the judicial system operating, improving the schools, getting markets reopened and people to work, improving the food distribution system, improving power and water services, and restoring trust in the Iraqi security forces.



SSG Len Danhouse, 3rd ACR, conducts a combat patrol in Tal Afar in February 2006. Attacks in the city were reduced from 170 to fewer than 20 per month by the time the Brave Rifles redeployed.

Civil Affairs teams managed more than $4 million in projects designed to restore normal life to the city while security continued to improve. Early warnings of attacks became common as the people of Tal Afar grew confident in the Iraqi security forces and the Coalition's commitment to ensure their security.

The Iraqi army and Iraqi police played critical roles in securing the victory after major combat operations in Operation Restoring Rights. They participated in humanitarian assistance operations, controlled key routes in and out of the city, secured important infrastructure and construction assets, recruited police candidates, deterred crime, and cooperated with local government and tribal infrastructure. They conducted regular foot patrols of markets and arranged support contracts with local businesses. In all, more than 1,000 new police officers were added to the Tal Afar police force, and four police stations were rehabilitated. The Iraqi army and Iraqi police were accepted by the vast majority of the population because of their demonstrated actions for the benefit of Tal Afar's citizens.

Sabre Squadron continued to perform combat missions, albeit in reduced form. Prior to the October 2005 constitutional referendum, insurgents unleashed three devastating attacks in Tal Afar, killing scores of Iraqis and wounding many more. Tal Afar's citizens refused to buckle—more than 97,000 citizens voted in Iraq's constitutional referendum in October, and more than 40,000 cast ballots in December's national elections. By the time the 3rd ACR redeployed in February 2006, attacks in Tal Afar had dropped from 170 to fewer than 20 per month, most of which were ineffective. Challenges remained, but the fear and terror that gripped the city upon the 3rd ACR's arrival were no longer present. Normal life was returning to the city.

Overt achievements were the key to victory in Tal Afar for the Iraqi people and their government. The partnership between the Iraqi army, Iraqi police and the 3rd ACR created synergy that afforded Tal Afar and its environs a period of security and stability that was unimaginable prior to Operation Restoring Rights.

Significance

In the short term, the battle for Tal Afar severely disrupted al-Zarqawi's ability to use the city as the center for insurgent operations in northern Iraq. The improved security conditions allowed the people of Tal Afar as a majority to reject the *Takfiri's* brand of hatred and violence and to enjoy life and peace in their city once again. They also voted en masse in the October constitutional referendum and the December national elections. In February 2006, as the 3rd ACR redeployed, al Qaeda in Iraq bombed the Samarra mosque, abruptly shifting the war in Iraq into a new phase of civil war.



DoD/PO1 Alan D. Monyelle, USN

U.S. and Iraqi soldiers, their mission to disrupt insurgent safe havens and clear weapons caches, cross an intersection during a security patrol in Tal Afar in September 2005.



DoD/SSgt Jacob N. Bailey, USAF

SPC Antoine Davis, 1st Brigade Combat Team, 2nd Battalion, 37th Armored Regiment, 1st Armored Division, patrols a residential street in Tal Afar in August 2006.

In the long term, the 3rd ACR's successful application of the principles of full spectrum operations and counterinsurgency—before new field manuals (FM) were written—showed the rest of the U.S. Army, joint forces and Coalition forces how to successfully conduct counterinsurgency in the current conflict. The surge of American troops in Iraq was successful not only because combat troops were increased in Baghdad, but also because those combat troops were employed according to principles of success in counterinsurgency warfare, demonstrated first in Iraq by the 3rd Armored Cavalry Regiment in Tal Afar.

Analysis

The 3rd Armored Cavalry Regiment successfully applied principles of full spectrum operations in Tal Afar, which, according to FM 3-0 *Operations,* "combine offensive, defensive and stability or civil support operations simultaneously … to seize, retain and exploit the initiative … informed by a thorough understanding of all variables of the operational environment." Full spectrum operations emphasize the importance of initiative, which the 3rd Armored Cavalry Regiment seized in Tal Afar by steady persistence born of preparation that shaped the operating environment and created opportunities. In September, initiative was decisively wrenched away from the insurgents when Operation Restoring Rights swept away the insurgent infrastructure and created a vastly more secure environment, enabling stability operations to accelerate exponentially.

The U.S. Army's preferred method of command and control in full spectrum operations is mission command, which expresses the commander's intent and then gives subordinates the greatest possible freedom of action. For example, one of the regimental lines of operation was civil-military operations. Without specific guidance, the regimental surgeon led a regimental medical civil-military operation that engaged frequently with the Tal Afar hospital, offering assistance, collaborating in problem solving and improving the capability of the Iraqi government to care for its people. As this operation developed and was implemented over several months, it was fully supported and resourced by the regimental commander and staff, enabling its success.

Full spectrum operations require simultaneous application of offensive, defensive and stability operations, which the 3rd ACR demonstrated successfully. Offensive operations throughout deployment, and particularly during Operation Restoring Rights, demonstrated the importance of intelligence-driven operations to precisely target attacks on insurgents and their strongholds, avoiding further antagonizing the population through overuse of force. The enemy was disrupted and dislocated from its physical bases, American and Coalition forces safely occupied the city in progressively greater depth, and the insurgents were further isolated from the population by increased human intelligence.

An important role of defensive operations in full spectrum operations is to establish a shield behind which stability operations can progress. This was the case in Tal Afar as strategic terrain, such as the castle and the hospital, was secured and occupied, creating safe locations for the local populace to meet with 3rd ACR leaders to discuss and plan stability operations.

The 3rd Armored Cavalry Regiment's achievements in stability operations, particularly after Operation Restoring Rights, were the key to its success in Tal Afar. Primary stability tasks include civil security, civil control, restoration of essential services, support to governance, and support to economic and infrastructure development. The 3rd ACR worked with Coalition units to establish civil security in Tal Afar by limiting the insurgents' influence and isolating the insurgents from the people. Essential services and infrastructure were vastly improved after Operation Restoring Rights. More than $60 million was pumped into the city by Civil Affairs and the Iraqi government. When the 3rd Armored Cavalry Regiment redeployed in February 2006, more than 90 percent of the city enjoyed electricity for 20 hours or more each day. Local governance was improved as the judicial system was reestablished, and the city government had begun to meet regularly to address local grievances.

The 3rd Armored Cavalry Regiment achieved the first campaign victory in Operation Iraqi Freedom in Tal Afar in 2005–06. New field manuals—including FM 3-24 *Counterinsurgency,* FM 3-0 *Operations* and FM 3-07 *Stability Operations*—formally established as core Army doctrine the principles employed successfully by COL McMaster and LTC Hickey in Tal Afar. The counterinsurgency campaign of the Brave Rifles in Tal Afar helped shape how the Army and joint forces will fight for at least a generation.

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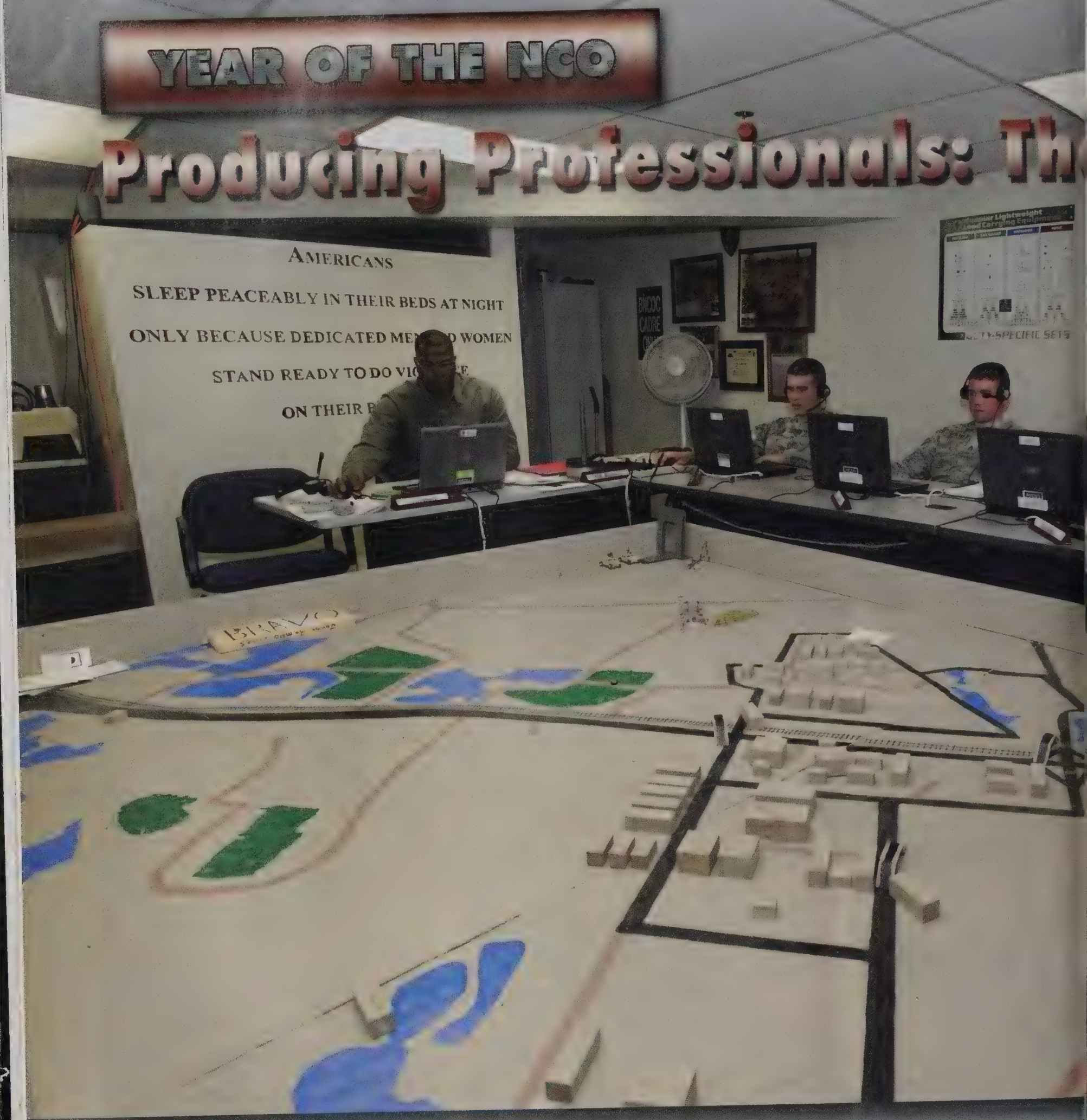
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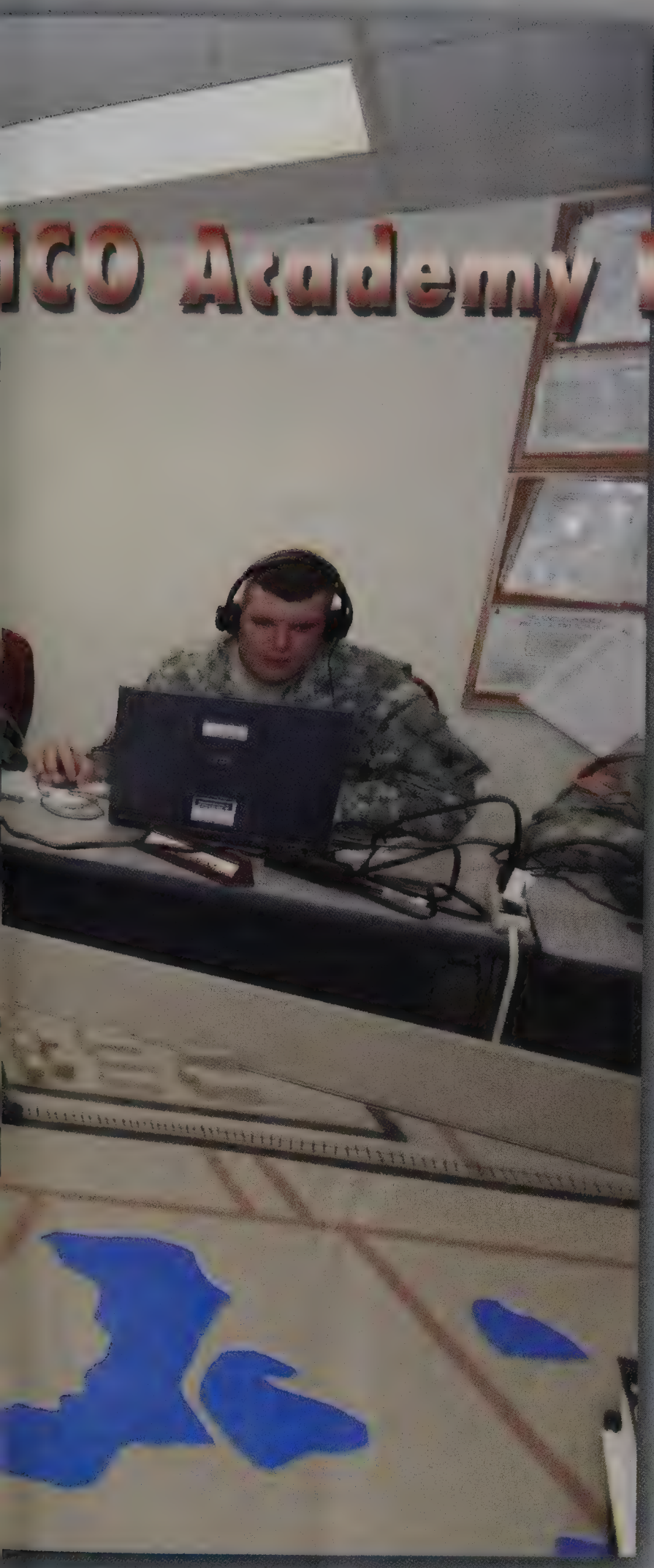
Students at the U.S. Army Noncommissioned Officer Academy, Fort Knox, Ky., participate in a command-and-control exercise, reacting to a decision-making scenario designed to expand their battlefield perspective.

The Army promotes soldiers to be noncommi sioned officers. The mission at the U.S. Army No commissioned Officer Academy, Fort Knox, Ky., to help mold them into professionals, and it leading the way in making curriculum chang that the Army needs to educate NCO leaders, broad their perspectives and expand their roles.

Given the nature of combat the Army has faced in Ir

ICO Academy Revamped

Text and Photographs
By Dennis Steele
Senior Staff Writer



warrior, what is sometimes called the 'pentathlon NCO,'" said CSM Ray Edgar, the academy's commandant. "We are really getting after the adaptive leader concept—not just addressing the NCO in combat, but all the principles and important tasks necessary for the full NCO."

"What I want to produce is an NCO who is a functional member of his leadership team, working with his officer. That will make both a better soldier and a better officer," CSM Edgar explained. "I want NCOs who step to the forefront, so we are teaching them *how* to think, not *what* to think."

The Army's strategic emphasis in revamping the Noncommissioned Officer Education System (NCOES) is to expand NCOs' direct participation in staff and command functions, to communicate clearly on the same level with commissioned officers and to have the capability to fully take over their jobs if necessary, especially in combat situations, while still maintaining traditional NCO roles and functions. To that end, NCOs must appreciate the frames of reference and approaches that commissioned officers employ so that they will be able to understand a situation from the same perspective as a commissioned officer and contribute within an expanded range of activities. It is not that the Army is trying to turn NCOs into officers; it is simply a matter of having leaders with a common perspective and understanding. As an NCO moves up in rank and responsibility, those things become more important, and as an NCO moves through the series of NCOES courses during his or her career, those advanced elements will carry greater emphasis.

"We can quickly become obsolete if we don't communicate effectively with officers," CSM Edgar explained. "And we are acknowledging that the NCO's role is expanding. We're not compromising ourselves as NCOs. We can be stern disciplinarians *and* effective communicators."

Much is being incorporated into what was called the advanced NCO leadership course, which, for infantry, armor and cavalry NCOs, is now called the maneuver senior

fghanistan and other parts of the world, more has been sked of NCOs in recent times, and even more is likely to e asked in the future.

"We have to make them adaptive," said 1SG Tim letheny, deputy commandant of the Fort Knox academy. An NCO today has to be adaptive and multifunctional—a ybrid warrior."

"NCO education is being geared to produce that hybrid



Students issue orders over a simulated command network.

leader course. To prepare NCOs to assume positions one or two levels above their rank, some elements of the first sergeants' course and Sergeants Major Academy are being pushed down to that course. The Sergeants Major Academy curriculum will adapt to better correspond to the Command and General Staff College (CGSC) curriculum, and the Sergeants Major Academy will eventually relocate to the CGSC's home at Fort Leavenworth, Kan., to strengthen the bonds between the two courses.

The Fort Knox NCO Academy, located at the Army's Armor/Cavalry Center, and the NCO academy at the Infantry Center, Fort Benning, Ga., hosted the primary tests for curriculum shifts outside the Sergeants Major Academy. The changes developed there will be adapted and incorporated at the rest of the Army's NCO academies.

While changing a course is an elaborate task, the Fort Knox academy had the maneuver senior leader course requirements completed 12 months ahead of schedule and the advanced leader course ready nine months early.

In general, the maneuver senior leader course uses situational training and discussions as teaching methods—rather than rote learning and testing—to advance adaptive leadership. As the information load and complexity were increased by about half, the course time was shortened from the previous advanced NCO-course length (10 to 13 weeks) to a seven-week course.

"The result is that the NCOs attending the course are challenged," CSM Edgar said. "The response from them has been positive. These guys tell me that this is all worthwhile and that they are very satisfied. The students get a vote."



CSM Ray Edgar, commandant of the Fort Knox NCO Academy.

To achieve this required shifting of the mind-set and culture within the academy cadre, excluding those who could not or would not adapt, and bringing everyone into the project as a team. Only a cohesive unit could "fully execute the academy transformation," CSM Edgar said.

CSM Edgar, who took over as commandant in March 2008, said he had to make the cadre and civilian instructors "understand the impact that this could have—that this was a one-time chance to make an impact on the Armor and Cavalry branches."

"As instructors, the first thing we needed was credibility," CSM Edgar said. "Now we have about 95 percent combat veterans, which makes each of them credible and relevant to the student population—they can talk to a guy who's had three combat tours."

"Ultimately," CSM Edgar added, "what allowed us to make this transformation was taking ownership as an academy and individually. Each first sergeant and instructor took individual ownership and stepped up. And I have to be thankful for the command autonomy we were given. All this was NCO built, NCO run, NCO taught and with NCOs responsible."

Since most combat arms NCOs in service today have combat experience, a hurdle is making them understand the benefit of institutional training, according to the commandant.

"Many of them come here with the attitude of 'I don need this. I've done it all.'" CSM Edgar said. "We have to show them that there are more skills necessary to be an NCO than kicking down doors. We have to sell them on this because experience in an operational environment is not a substitute for institutional learning. And we can never rest. Everybody here understands that this requires constant refinement."

"Nobody had to sell me on how important this is," CSM Edgar said. "Intellect is the most important thing our NCOs bring to the fight."

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Sharing What We Learn

Given the wide scope and high stakes of our responsibilities, we'd be crazy not to do everything we can to learn from each other's experiences. Our individual experiences may vary based on branch, location and other factors, but at their core, our experiences of command always involve leading our Soldiers to accomplish the mission. Every month, a member of the CC forum steps up to share his or her particular experiences leading Soldiers. Listen in as two recent CC Featured Members—one who commands stateside, the other who commanded in combat—talk about what they have done and learned as commanders. Laura and Dave are great examples of leaders humbly doing their part to help raise the bar of company command across our profession.

Laura Levillier

Co. A, Walter Reed Army Medical Center Brigade
CC Featured Member, April 2009

On becoming a Soldier. I was born and raised in Grosse e, Mich. My parents always set the example of being self- ufficient, working for what you receive and being a good cit- zen. I attended the University of Toledo in Ohio. After my first semester at college, I realized that I had lost my discipline. I took Military Science and Physical Training my second semester and found that I really enjoyed them and gained more confidence. The next year, September 11th happened. I sat in the cadet lounge, watching in horror as the planes slammed into the World Trade Center, and I thought, "If I can join the Army that defends the nation, that keeps my family safe and free, what kind of person would I be if I didn't do it?" I haven't looked back since. In my free time I love to cook, travel and get out for a run. Living in Washington, D.C., I love to run by different embassies and quiz myself on their flags.



CPT Laura Levillier, Company A, Walter Reed Army Medical Center Brigade, administers the reenlistment oath to SSG Dudley Walsh at the World War II monument on the National Mall.

On her current command. My company falls under Walter Reed's Medical Center Brigade. My Soldiers are exclusively AMEDD Soldiers and officers assigned to the hospital. My folks staff eight different departments composed of 32 different sections and clinics. When I came here, the sheer size of my Soldier mission made me feel like I was in over my head. How on Earth could I command this company when it was bigger than my last battalion and



From left to right, CPT Levillier and her fellow company commanders in the Walter Reed Medical Brigade, CPT Taira Caldwell, CPT Margaret Solecki, CPT Reqina McCants and CPT Tracy Ann Ruglass, work as a team to accomplish their mission.

when two-thirds of its population are field-grade officers? Then I figured that if I was going to be asking them to do stuff for me while they juggled patient demands, I might as well go and say hello to them so they wouldn't think of me as some sort of faceless person who hides behind e-mail.

So, while I was in-processing, I asked for the list of all my clinics and the names of their chiefs; all but three of them were O-6s. After meeting with the NCOs and Soldiers in each section, I mustered all the courage I could and knocked on the door of every chief. I went in, shook their hands and said, "My name is CPT Levillier. I am going to be your company commander, and I am here to help you be responsive to patients." I was totally shocked by their positive responses. One service chief told me he had been at Walter Reed for 18 years and that was the first time a company commander had come to talk to him. That was the starting point of what has been a really positive experience. And, of course, my Soldiers are wonderful. They have to see a lot of difficult things, especially when helping out with medevacs. All of them are tough, talented and compassionate to their fellow Soldiers. They make me proud.

Although no patients fall under my command, I owe a debt of gratitude to all the wounded warriors, especially because I came back intact from two deployments. The gripes I have or the butt-chewings I endure melt away instantly when I see a Soldier who is blind, missing limbs or confined to his bed. All my issues seem so petty compared to theirs and—truth be told—they are. The intestinal fortitude of these Soldiers is amazing; they refuse to feel sorry for themselves, and they never quit. Whenever I am feeling down, I think of one Soldier in particular. At a Purple Heart ceremony I attended, a young specialist, kind of thin, came up to the stage by him self in a wheelchair. Both of his legs were gone. He receive his Purple Heart and his Combat Infantryman's Badge When they were done pinning his awards on, he was give the opportunity to address the auditorium. Speaking quietl he said, "I just want to thank everyone in my unit and every one here at Walter Reed who has helped me. I know I hav no legs, but I'm not sorry. I would do it all over again be cause I love my country and I love the Infantry." I felt like had been struck by lightning! That young Soldier with r legs told us all exactly why we are here. I told him after th ceremony how much he pumped me up. My only regret that I don't know his name. I wish I did so I could really t him what he did for me. He has no idea.

On reenlisting Soldiers. The year I took command, v exceeded 120 percent reenlistment in all categories in thre quarters, and we'll smash our goal again this year. Wo has spread throughout the company that if someone as me to be their reenlistment officer, I am going to give the an awesome ceremony. Washington, D.C., offers unique c portunities for memorable reenlistments, and we take f advantage of it. When we go to a monument, more oft than not a crowd gathers and watches the ceremony. I ta very seriously my role of being a good steward of t Army's image, so I make sure everyone watching knows e actly what my Soldiers are about to do, what their jobs a any deployments they have been on, where they are from everything. After the reenlistment, a lot of civilians shake Soldier's hand and ask for a picture. I think this helps Soldiers really feel the impact that their commitment has their fellow Americans. I wish all Soldiers were so lucky.

On working with fellow commanders. For me, they are a sounding board and a mental "combat multiplier." I am ortunate to serve alongside five fantastic leaders who ıave taught me so much about taking care of Soldiers. Our TDA does not authorize company XOs, so we really had to :ome together as a team. Everyone has strengths, and we hare them with each other so that we all can be success-ul. Working with them has forever changed how I will work vith people. It is one of the biggest parts of being a com-ıander that I will miss.

Dave Gohlich

I & HHC, 3/2 Stryker Cavalry Regiment

CC Featured Member, March 2009

On becoming a Soldier. I grew up in northeastern New ersey, not too far from New York City. I went to the Military cademy at West Point for the education, with no real de-ire to make the Army a career. I figured I would be a civil-ın in a few years. Ranger School, combat, the challenge f the job and, most importantly, the Soldiers changed my ıind. There is no better job in the world than to be an In-ıntry company commander.

On training. The most important lesson I could pass on that your Soldiers will operate under stress exactly how ıey were trained. If you put them in realistic, challenging ıd increasingly stressful situations in training, they will do ıeir jobs in combat. If you don't push them beyond their reconceived limits in training, then many will freeze up in ombat when the bullets start flying.

For example, if you are going to run a medical-training ne, once Soldiers are trained what to do, make it the most fficult and stressful event you can. Do not take any short-uts in training. Every time you put a tourniquet on in train-g, it should be tight enough to work in real life. By the time ou get ready to deploy, your Soldiers should be able to op the bleeding and start an IV without a second ought—after an 8-mile run with sweat pouring down their ces and their squad leader screaming in their ears. Sol-ers should be able to hit a target on the range at 150 me-rs, kneeling or standing, exhausted, with sweat running in their eyes and with artillery simulators going off next to them. If your Soldiers can move under a heavy load, hit a target when stressed and tired, treat a casualty the right way and think clearly under the worst conditions, then you have done your job preparing them for combat. Training is not a time to be a nice guy as a commander. Your Soldiers may hate you in garrison, but they will come to respect you in combat for what you did to get them ready and bring them back home alive.



CPT Dave Gohlich, who commanded "Hammer Company," 3rd Squadron, 2nd Stryker Cavalry Regiment, in Iraq, stresses the importance of rigorous training prior to deployment.



CPT Gohlich also finds it essential for soldiers to have some leisure time every few days.



CPT Gohlich, with his 1SG Rob Bowman at Combat Outpost Aztec in Baghdad, understands that leaders make mistakes and need the support of their COs.

The impact of weather in Iraq. In the summer, Iraq is hot beyond anything I have ever experienced. Wearing all that gear and walking around for 8–12 hours in 120-degree heat will tax even the fittest Soldier. Overweight or out-of-shape Soldiers will quickly become useless in this weather. Soldiers must be in shape when they get there. They need to drink a lot of water. We used the powdered electrolyte mix in every other bottle of water we drank, and it helped. Soldiers need to get into a rhythm of how much water they need to drink on missions and stick to it, and leaders need to work out a cycle of work and rest.

Another factor to consider is adjusting your patrols based on the time of year. In the summer, no one in Iraq moves from 1100–1800 hours due to the intense heat. The early morning and early evening are when everyone is out and about, so we adjusted many of our missions to take place when people were awake. We did find the best time to do raids was around 1400, at the hottest part of the day. You can almost always find your target passed out on a mattress and take him without a fight. In the winter, our missions were during the day, 0800–1730; it is too cold for people to move around much at night. Our raids, however, usually took place around 0200 when it's 20 degrees and everyone, including the lookouts, are usually asleep or inside trying to get warm.

On leader development. Leaders make mistakes. I don't think I can even count how many I made. Leaders need time to develop in combat and need the support of the CO. There are things that cannot be fixed—dishonesty, cowardice, not caring about your Soldiers—but other than that, most mistakes can be fixed. Sometimes we get so busy that we look forward to the next mission and do not reflect back on what we just did. Take time to sit down with the young LTs and talk through what happened. Many of them are seeing combat for the first time. Talk about what went right and what didn't. Most importantly, talk about one or two things to fix for next time. If you do this a few times a week, it is amazing the sheer number of lessons learned and fixes to mistakes you can make. I tried to be honest about my own mistakes during these discussions, and I learned a lot about things I needed to fix from my PLs and my 1SG.

On mental fitness and physical fitness. The most important thing I found was to give the Soldiers some time every few days to relax. It's different for everyone, but they need something (e.g., watching a movie, working out, reading, playing video games) to help them unwind. On the flip side, when Soldiers have too much time off, they start getting bored and rusty, so balancing mission time and time off is key for a commander. If you can swing it, about three days of hard work to one day off is best.

Staying in shape during continuous combat ops is hard for Soldiers and even harder for leaders. Show up in top shape yourself so that when you start working 20-hour days, your body can take it. Start with a good overall base; as you get closer to deployment, you need to get more combat-focused. I am a firm believer that if you want to get better at running, then you need to run. The same applies to combat ops. The best stuff we did was IMT drills in full kit with CASEVAC training and problem-solving tasks for the leaders. The closer you can get to what you might see (running up stairs for urban combat, climbing rough terrain for Afghanistan) the better.

A fundamental assumption of the CC forum is that every experienced commander has valuable experiences to share. If you are currently a commissioned officer, log on to http://CC.army.mil or write to cocmd.team@us.army.mil and share your hard-earned stories and lessons learned. You can make a difference for today's and tomorrow's commanders.



Soldier Armed

EXACTO

By Scott R. Gourley

It's a process that is repeated across the U.S. Army materiel development community: At the same time that military and industry representatives work to develop and rapidly field weapon systems optimized for current combat operations, other teams study and explore the possibilities of future enhancements to further expand the capabilities of those systems. A case in point involves the U.S. Army's .50-caliber sniper rifle systems, including the M82A1, XM107 and M107.

The latest addition to that .50-caliber inventory, the M107, was approved for full materiel release to soldiers in the field in early March 2005. Credited by Army program managers with greater capabilities to identify and defeat multiple targets at increased ranges, the M107 is manufactured by Barrett Firearms Manufacturing Inc., Murfreesboro, Tenn. Snipers can employ the weapon system with a variety of .50-caliber munitions; the new system has been publicly credited with enabling Army snipers to accurately engage personnel and material targets out to distances of 1,500 and 2,000 meters, respectively.

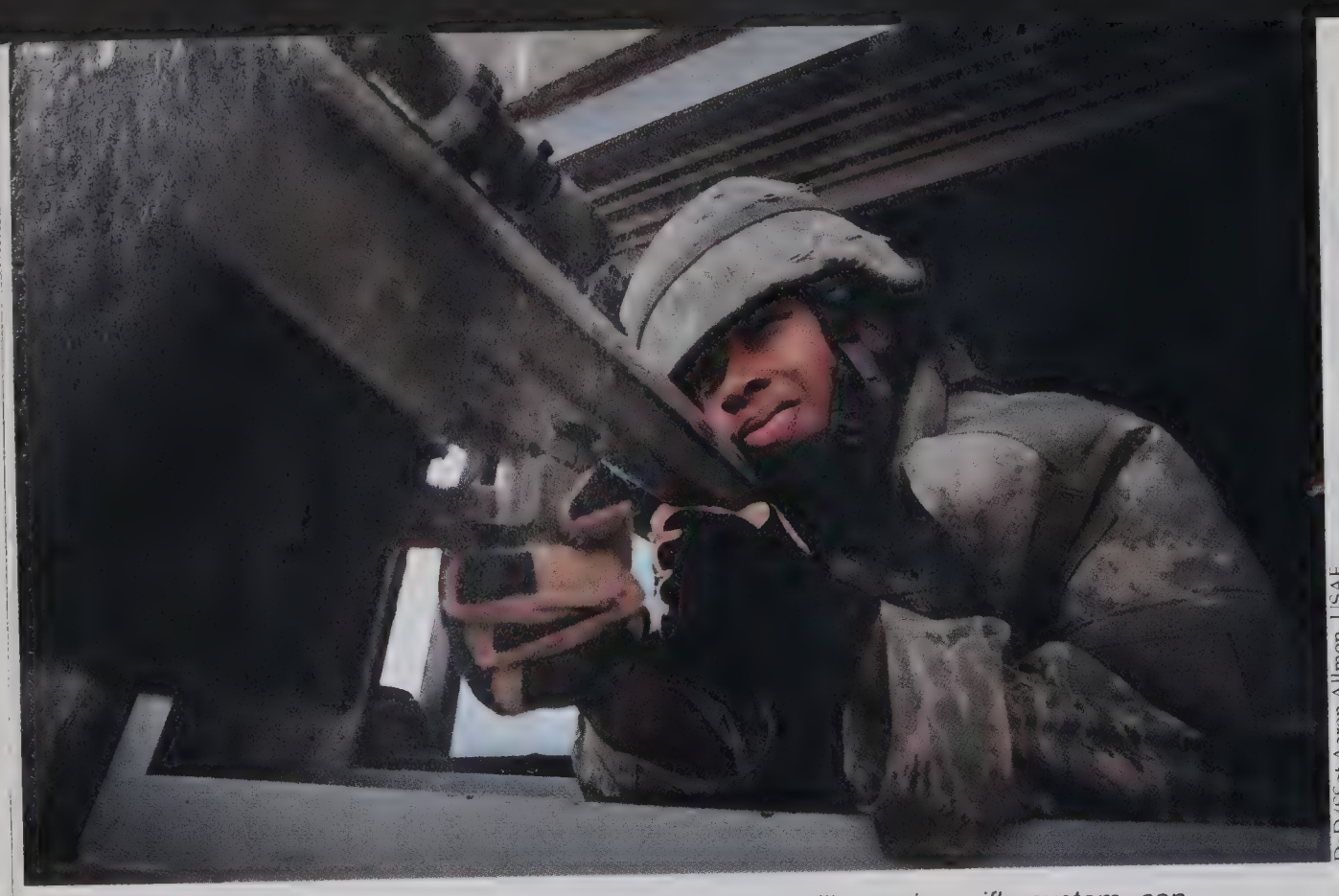
At the same time that those new capabilities were reaching soldiers' hands, other investigations were already shifting to ways to add even greater capabilities to those systems. In a broad agency announcement (BAA) in the spring of 2008, the Defense Advanced Research Projects Agency (DARPA) announced a desire to seek "innovative solutions that will expand the knowledge base and design capabilities for the EXtreme ACcuracy Tasked Ordnance (EXACTO) program," which DARPA described as "an advanced technology development and demonstration program to create a guided, actively controlled .50-caliber sniper rifle system with significantly improved range and accuracy over the current systems."

Prior to the BAA release, industry briefings had outlined an EXACTO system composed of an optical guidance system that provides information to direct the projectile to the target—regardless of environmental or target perturbations—paired up with an actively controlled .50-caliber projectile that uses the provided information for real-time directional flight control.

In further clarifying that vision within the parameter of overall program goals, the subsequent BAA explained: "The ability to more accurately prosecute targets at significantly longer range would provide a dramatic new capability to the U.S. military. The use of an actively controlled bullet will make it possible to counter environmental effects, such as crosswinds and air density, and prosecute both stationary and moving targets while enhancing shooter covertness. This capability would have the further benefit of providing increased accuracy and range while reducing training requirements.



One of the highly desirable features of the EXACTO (EXtreme ACcuracy Tasked Ordnance) system will be its adaptability. It will be used in conjunction with .50-caliber rifles (M82A1, XM107 and M107) by modifying only the sights. Here 1LT Patrick Higgins (foreground), 1st Battalion, 4th Infantry Regiment, surveys a distant village in Afghanistan as SPC Aaron Trapley and SGT Gary Fordyce provide sniper overwatch and SGT Nicholas Gauthier provides security.



DoD/SSgt Aaron Allmon, USAF

The M107, the Army's newest .50-caliber sniper rifle system, can engage targets at 1,500–2,000 meters. A1C Kara Dykes, from the immediate reaction force of 332nd Expeditionary Security Forces, mans an M107 at the entry control point of Joint Base Balad, Iraq.

The government's point-of-departure system architecture consists of: a sighting system that aids the shooter in identifying the target; a guidance system that provides information to direct the projectile to the target regardless of environmental or target perturbations; an actively controlled .50-caliber projectile that uses this information for real-time directional flight control; and a .50-caliber rifle."

Although specific system performance objectives for engagement ranges, accuracy and engagement target speed parameters are classified, publicly released descriptions outline a three-phase exploration program: Phase I—Component Development, Preliminary Design and Performance Validation; Phase II—System Integration and Prototype Demonstration; and Phase III—Operational Assessment/Transition.

Emphasizing DARPA's interest in "innovative proposals for end-to-end system solutions for EXACTO," the 2008 BAA identified potential "technologies of interest," including "fin-stabilized projectiles, spin-stabilized projectiles, internal and/or external aero-actuation control methods, projectile guidance technologies, tamper proofing, small stable power supplies, and advanced sighting and optical resolution technologies." The BAA added, "Other advanced technologies may also be developed and demonstrated as required by the architectures proposed by offerers."

Fin-stabilized projectiles, for example, could be stabilized by aerodynamic forces generated by projectile tail fins while trajectory control could be derived from lift/drag generated by canards, body flaps or a change in body geometry. In contrast, spin-stabilized projectiles could be stabilized by gyroscopic forces while trajectory control could be derived from torque produced by an internal clutch, internal off-center mass, or exploding "squibs" located around the periphery of the projectile. Various potential guidance and control technologies could include inertial navigation, radio frequency (command or beam riding), or various electro-optical technologies. In terms of EXACTO sighting technologies, planners envisioned several potential capabilities for rifle scopes, including image stabilization, so-called target lock, and multiple simultaneous magnification ("picture in a picture").

In November 2008, DARPA announced the award of BAA EXACTO contracts to Lockheed Martin Missiles and Fire Control (Grand Prairie, Texas) and Teledyne Scientific & Imaging LLC (Thousand Oaks, Calif.). In terms of notional EXACTO system performance, the industry teams are exploring a number of "nontradeable" DARPA requirements as well as other "highly desirable" attributes identified by DARPA planners.

For example, while many of the nontradeable requirements obviously remain classified, they also included the mandates that any EXACTO approaches must "not expose the shooter more than the current M107 system (minimal firing signature, covertness)" and must deliver "energy and momentum of projectile equal to current .50-caliber sniper round (Ball, M33) at all ranges beyond 300 meters."

In "descending order of importance," the highly desirable attributes identified in the BAA include: no heavier than 46 pounds and with similar volume to current two-man sniper system (based on M107 rifle with Leupold scope, magazine loaded with 8 rounds, M551 Gold Ring observation telescope with tripod, AN/PAS 13C heavy thermal weapon sight, AN/PVS 14 monocular night-vision device, and sniper's data book—including slide rules and data cards); secure and tamper-proof design to prevent misuse and exploitation of any portion of the system if obtained by an adversary; more than 10-year shelf life of cartridges; significantly reduced signature compared to the current M107 sniper system; sufficient power to support a 14-hour mission (that is, longest day); inherently producible design; inherently low cost; a "fire-and-forget" round design; greater range, target velocity and accuracy characteristics than those listed in the classified nontradeable requirements; the ability to use current .50-caliber rifles (M82A1 XM107 or M107) without modification (except sights); and the ability to use standard ammunition (Ball, M33).

While any new materiel solution to the EXACTO challenges may still be years away from soldiers' hands, the importance of the program stems from the underlying process that it represents: providing optimized capabilities for today's warfighters while constantly working to harness the technologies to enhance and expand those capabilities tomorrow.

AUSA Sustaining Member Profile

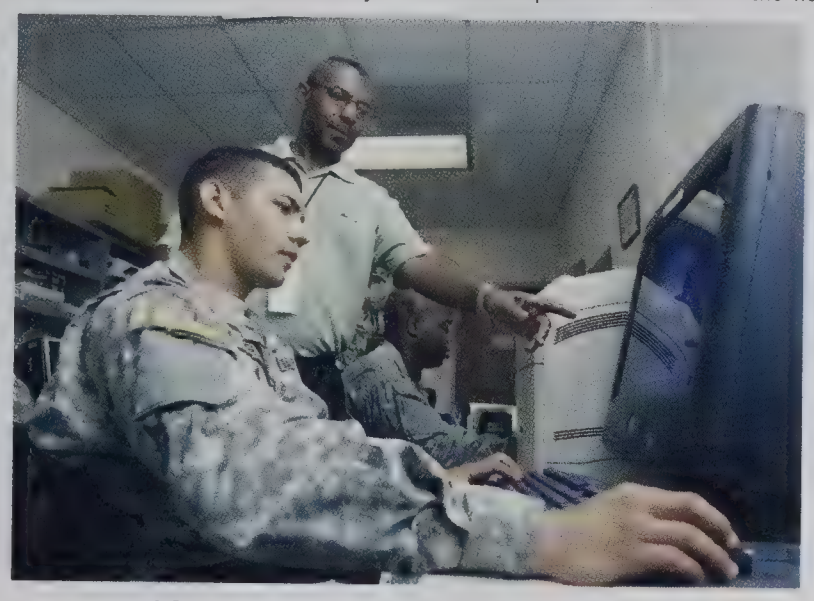
Serco Inc.

Corporate Structure—CEO: Ed Casey. Number of Employees: 11,500. Headquarters: 1818 Library Street, Suite 1000, Reston, VA 20190. Telephone: 703-939-6000/866-997-3726. Web site: www.serco-na.com.

Serco North America (Serco) is a leading provider of professional, technology and management services to the U.S. federal government. The company advises, designs, integrates and delivers solutions that transform how clients achieve their missions.

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Serco is one of the largest and the longest standing providers of support services to U.S. Army personnel and their families. Serco's ability to step in and manage a range of administrative processes has made needed Army personnel available for higher priority assignments, has increased human resources (HR) efficiency and productivity, and has lowered administrative costs—all within mandated budgetary constraints.



A Serco employee works with soldiers at the Army Career and Alumni Program at Fort Gordon, Ga.

Serco understands and supports the entire Army human resource life cycle, from recruiting and training to family support and career transition. Serco has supported the Army's HR efforts for more than 20 years, meeting the Army's HR challenges through making organizational assessments, using best practices and reengineering business processes. In addition, Serco is experienced in transition services, soldier education and training, unit transformation, special studies, family programs, installation support services, mobilization and demobilization, and information management.

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Beyond its support of Army soldiers, Serco works with Army families to ensure they have the support and services needed when dealing with the challenges that accompany military life, from providing support to the families left behind when a loved one is deployed to serving as advocates for victims of domestic violence and sexual assault and helping soldiers make the transition back into civilian life.

Family Advocacy. Serco has been a trusted contractor supporting the family advocacy program, which has headquarters staff and field personnel located at Army installations worldwide. Serco has worked with the Army to evolve its family advocacy programs to effect cultural change.

Military Career Transitions. Making the transition from military life to civilian life can present challenges and frustrations. Serco military career transition specialists have supported the Army career and alumni program for nearly 18 years, working with individual soldiers to help establish a firm footing in the civilian world, helping to maximize the same skills and abilities that made them successful in the military.

Army Wounded Warrior Program (AW2). Serco provides counseling and support to wounded soldiers and their families through a system of advocacy and follow-up to severely injured and ill soldiers and their families. The personal (nonclinical) support helps soldiers during rehabilitation and transition back into military service or the civilian community. Serco personnel support AW2 at medical treatment facilities, Warriors In Transition units, soldier and family assistance centers, and Department of Veterans Affairs medical centers across the United States. Ninety-five percent of all AW2 personnel are former Army officers and noncommissioned officers.

Casualty Support Services. When soldiers are injured or killed while serving their country, Serco supports the Army Casualty and Mortuary Affairs Operations Center in the notification process. Serco also supports the Joint Personal Effects Depot to quickly and respectfully process the personal effects of deceased soldiers in an effort to ensure that all belongings are properly prepared and returned to the soldier's family. While the military's processing goal is aggressive, the Serco team works hard to get the job done right and on time.

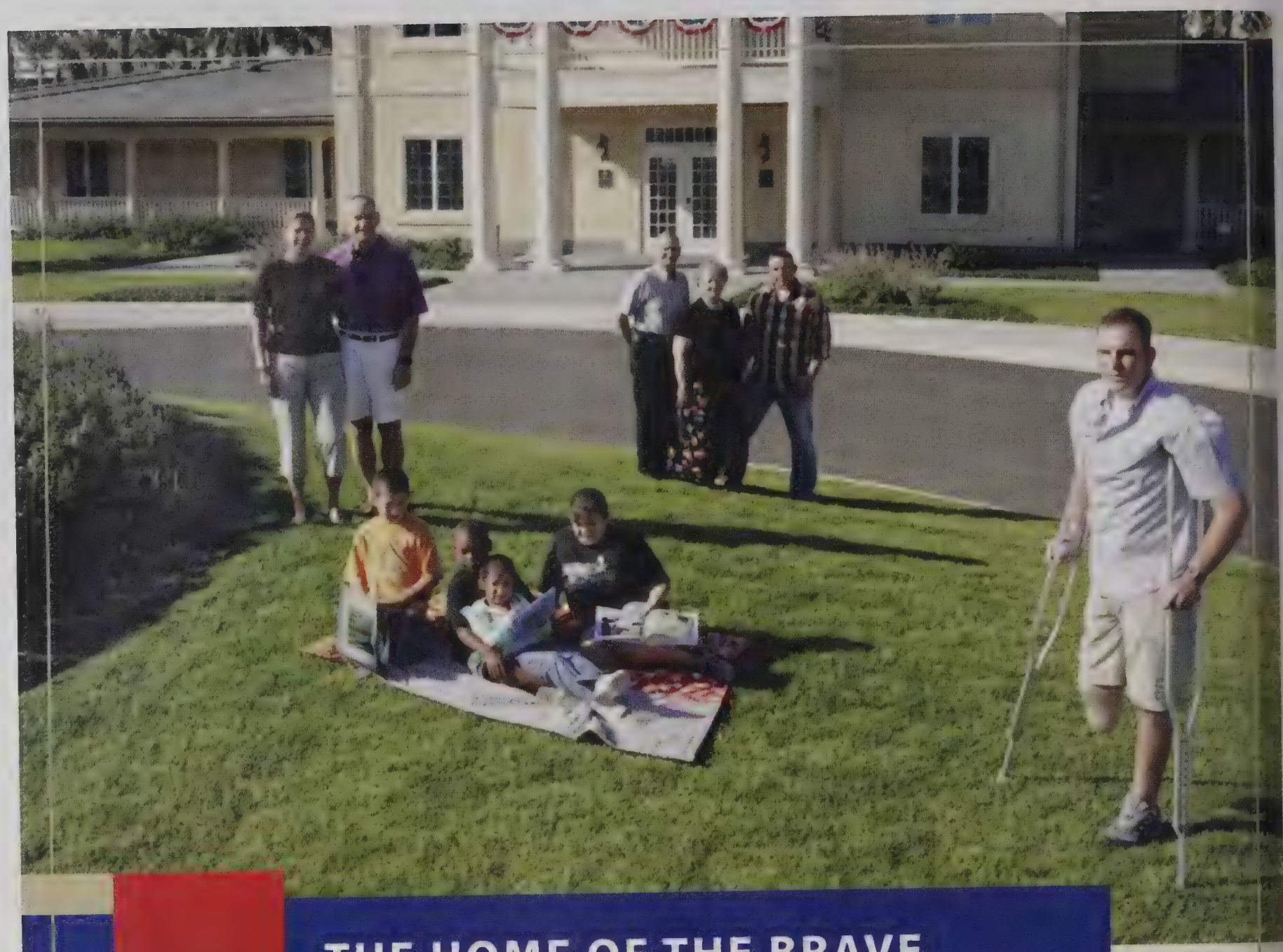
IT Solutions. Serco provides mission-critical information technology (IT), network and business process solutions to ensure the Army's continued effectiveness as the world's preeminent land force. Serco delivers the full IT life cycle to support the Army in designing and instituting IT solutions through the following systems:

- Joint net-centric operations.
- Bandwidth-network management.
- Information assurance.
- Business process outsourcing of military personnel office operations.
- Learning and performance support tools.

Serco designs and deploys solutions that meet the Army's important IT requirements for Joint force operations today, while establishing a platform for advancing the Army's long-term transformation into a Joint, net-centric fighting force. Expert systems engineering and software applications are provided by Serco to optimize communications and secure networks, which enhances information sharing across the Army's global range of operations.

Serco IT solutions support, for example, the Architecture Integration and Management Directorate, Army Training and Doctrine Command, Futures Center, Aberdeen Proving Ground, HQDA Military Personnel Service Center, Army Defense Ammunition Center, Army Spectrum Management Office and the Defense Acquisition University.

The U.S. Army can count on Serco to assist in its transformation and to deliver HR solutions and IT services to accomplish its critical missions.



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Reviews

First U.S. Army's Invaluable World War II Diary

ormandy to Victory: The War Diary of General Courtney H. Hodges & the First U.S. Army. *MAJ William C. Sylvan and CPT Francis G. Smith Jr., edited by John T. Greenwood. University Press of Kentucky. 575 pages; naps; black-and-white photographs; index; $50. An AUSA Book.*

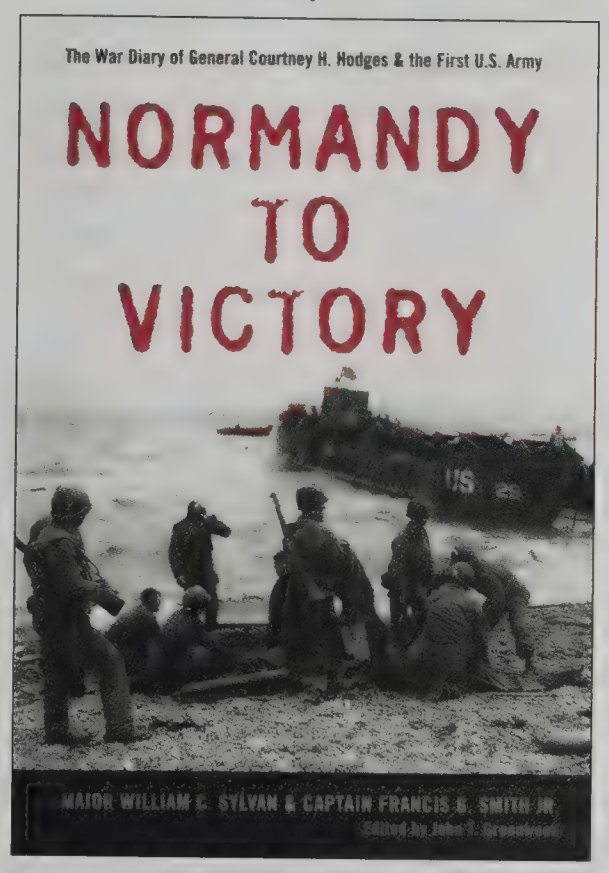
By COL Gregory Fontenot
U.S. Army retired

More than 60 years after its last entry, the World War II diary of First U.S. Army has at last been blished. Known to historians as the van diaries, *Normandy to Victory* is lliantly edited by John T. Greenod, a government military histon who worked for both the Army d Air Force history offices. His ef- is superb.

Generally, edited diaries add little to record, but Greenwood's careful, rough work remains faithful to the ry itself and to the context of the ef- of the two junior officers who proed the official diary of the largely ung and unknown commanding eral of First U.S. Army in World r II: GEN Courtney H. Hodges—unwn despite First Army's brilliant cesses, which included making the Allied penetration into Germany n the west in September 1944, rending after the Ardennes to seize bridge at Remagen in March 1945 us crossing the Rhine first) and ieving the first "link-up" with the sians in late April near Torgau, Gerny, on the banks of the Elbe River. moted to four-star general that il, Hodges and First Army were eased" in May 1945 in order to ve to the Pacific to prepare lead ps in the invasion of Japan.

ess formal than the official journals any soldier would remember from ntaining a staff duty journal, war ies at major headquarters were etheless critical to understanding the context of operations in those units that kept them. Hodges, as Greenwood points out, actively collaborated in the preparation of the daily entries by reviewing and approving them every evening. Thus they represent what Hodges considered appropriate. For that reason alone, the diary has limitations; it is intended to be read and thus the diarists refrain from including their deepest thoughts and feelings.

The tone of the diary varies, ranging from breathless accounts about going ashore in Normandy to faithful records



of what the general had for lunch. The entries are progressively more professional in tone, containing fewer aspects of a travelogue as time passes. What emerges is invaluable to anyone who is interested in the conduct of First Army operations at both the tactical and operational levels and in how these momentous events appeared at the time. For example, in the entries for the early days of the German counteroffensive in the Ardennes, Sylvan reports down to specific regimental-level detail when troops are hanging on, when they have been overrun and what the Army commander perceived was happening on the battlefield.

The entry for December 17, 1944, the day after the Germans attacked in what became known as the Battle of the Bulge, begins with Hodges speaking through Sylvan, concluding that the "Boche is staking his life on this drive." Extending for several pages, that day's entry includes a description of the massacre of American POWs at Malmédy, perpetrated by SS troops (subsequently identified as part of First SS Panzer Regiment, First Panzer Division), as reported by a military policeman who witnessed the killing. This young soldier, who feigned death to survive, was brought to the headquarters to report what he saw to the Army commander. In that same entry, Sylvan notes that the Germans had surrounded two regiments of the 106th Infantry Division.

Continuing, the diary discusses at some length reports of enemy parachutists in the area, continuing attacks by U.S. infantry divisions and rumors of deeper penetrations by German mounted forces that, on investigation, proved unfounded. Hodges made many decisions during that long day, met with or talked by phone to most of his corps commanders, and conducted a conference with nine or 10 U.S. Army Air Forces general officers led by MGs Hoyt Vandenberg and Elwood "Pete" Quesada to determine targets and priorities for the tactical air command forces in support of First Army. The diary delivers a sense of the complexity of the problem and both the confidence and fear felt on that December day long ago.

Greenwood treats the diary respectfully. He corrects spelling errors but does not trifle with content, preserving the tone and the context of what Sylvan and his colleague saw and heard as approved by the reticent and reserved Hodges. Greenwood makes no judgments but offers explanations and rigorously researched endnotes that further enhance our understand-

ing of events sometimes described only sketchily by the diarists. He also provides important biographical data on the officers, both friendly and enemy, who were encountered as Hodges moved around the battlefield. The result is that the Sylvan diary, always useful, is even more invaluable to those who would understand the American experience in World War II.

It is hard to see how anyone could do better than Greenwood has with the record of what Hodges saw, did and (when Hodges permitted it to be recorded) thought about what needed to be done. *Normandy to Victory* is a worthy addition to the library of any serious soldier.

***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he concluded his career in 1999 as commander of the Battle Command Training Program. He is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is currently director of the University of Foreign Military and Cultural Studies.*

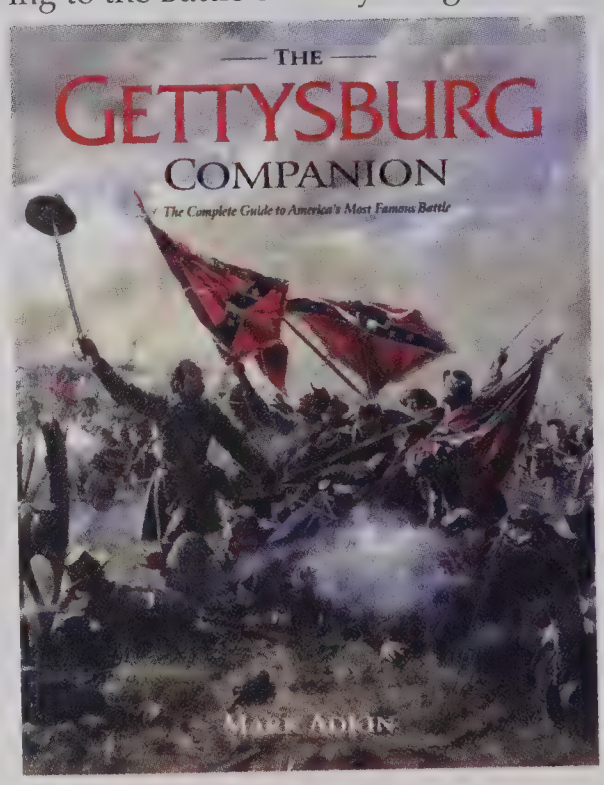
Gettysburg Revisited—'Battle Book on Steroids'

The Gettysburg Companion: The Complete Guide to America's Most Famous Battle. *Mark Adkin. Stackpole Books. 544 pages; maps; black-and-white and color photographs; schematic drawings; index; $69.95.*

By BG Harold W. Nelson
U.S. Army retired

About 25 years ago, the U.S. Army rediscovered the value of its old battlefields as venues for professional development. Historical staff rides on battlegrounds had been a feature of officer education from the early 1900s until shortly before World War II. When the Army passed responsibility for the National Military Parks to the National Park Service and airplanes, tanks and other new technologies seemed to have changed the face of battle, those staff rides disappeared. A few astute leaders of the Cold War Army, however, knew that the human dimension of warfare was scarcely modified by technological innovation, and they advocated study of performance in actual battles as a proper supplement to more theoretical classroom exercises.

When we turn back the clock, the characteristics of an earlier generation's wars—organizational structure, doctrine, weapons, and the backgrounds and capabilities of senior leaders—are different, so the staff ride leader issues some sort of "battle book" to help everyone understand those details as they apply to the campaign under review. Mark Adkin's *The Gettysburg Companion* is a battle book on steroids, and it offers hours of enlightening entertainment for anyone who cares to dip into details relating to the Battle of Gettysburg.



Back in the early 20th century there were only a few examples of similar companions. The Command and General Staff School at Ft. Leavenworth, Kan., assembled a comprehensive Chancellorsville Source Book in the 1930s, and Civil War veteran John Bigelow Jr. had published a document-heavy study of the same campaign in 1910 to support his ROTC course at Yale. These have long been out of print, and I know of no precedent for this treatment of Gettysburg, which Adkin modeled on his earlier volumes about the battles of Trafalgar and Waterloo.

The basic organization of *The Gettysburg Companion* is straightforward. After a prologue describing the Battle of Chancellorsville, we are introduced to the order of battle for the Army of Northern Virginia and the Army of the Potomac, followed by descriptions of the organization, equipment and doctrine of the combatant arms (infantry, artillery and cavalry). Short sections on supply, transport and control follow and provide the campaign overview and tactical treatment of the battle, constituting nearly half of the book. *The Gettysburg Companion* concludes with discussions of the aftermath of the battle and the 50th reunion of veterans in 1913.

Graphics are excellent throughou the volume. The schematic presenta tions depicting army units on the march are well conceived, and the maps and photographs used to illus trate the battle sections are very wel rendered. These features will mak the book something of a companion t most *other* books on Gettysburg b giving readers much better maps an tactical overlays than are found in th usual reference books.

Supplementing this treatment are nu merous sidebars and substantive illus trations, which add immensely to th appeal of the book and will be espe cially attractive to those who brows through it. These same features, how ever, will be less useful to those who a researching a particular topic, since n all are listed in the index and some a only loosely related to the basic narr tive with which they are associate This weakness is compounded by th occasional lack of attribution in these i teresting vignettes. For instance, whe readers are deep into the chapter on t infantry, we encounter three sidebars a two-page spread. One is called "C fee," and readers can infer from the te that it has been derived from John Billings' *Hardtack and Coffee,* which listed in the bibliography. The next

"Cherry-picking," which contains an explicit citation to its source and uses a direct quote. The third is "The Company Fund Fiddle," which describes inappropriate action by company commanders but cites no sources. The effects of this shortcoming are obvious: Users will find it difficult to find a particular topic, and when they find it, they may have no clues to further research.

Such lack of documentation will render large parts of the companion useless to serious researchers. But most of us will be quite pleased to find a volume in which someone has pulled together facts, statistics and interpretations from a variety of sources to give us a useful starting point on virtually any topic that might improve our knowledge of the armies that fought at Gettysburg.

LTG Harold W. Nelson, USA Ret., is a former U.S. Army Chief of Military History. He has served on the faculties of the U.S. Military Academy, the U.S. Army Command and General Staff College, and the U.S. Army War College.

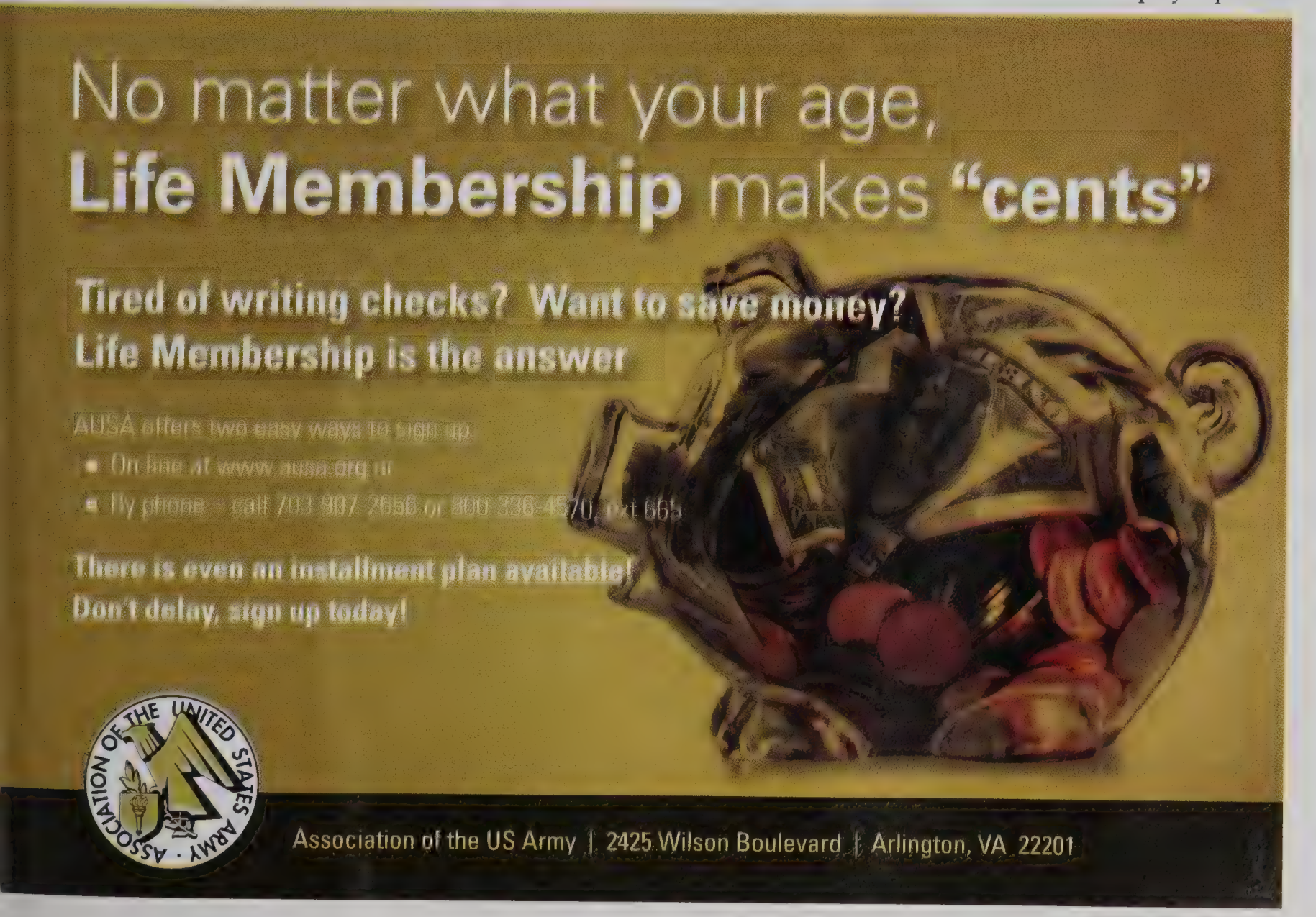
Heroes on the Diamond ... And the Battlefield

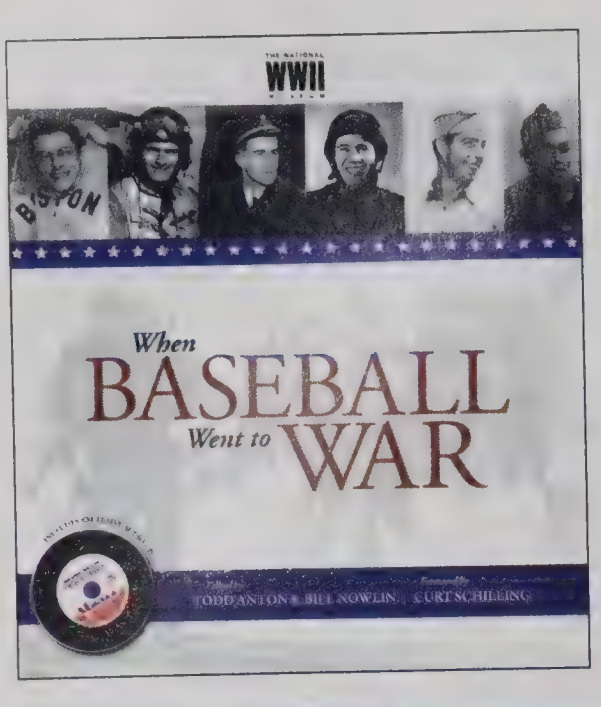
When Baseball Went to War. *Edited by Todd Anton & Bill Nowlin. Triumph Books. 256 pages; black-and-white photographs; audio CD; $27.95.* **The Corporal Was a Pitcher: The Courage of Lou Brissie.** *Ira Berkow. Triumph Books. 272 pages; black-and-white photographs; index; $24.95.*

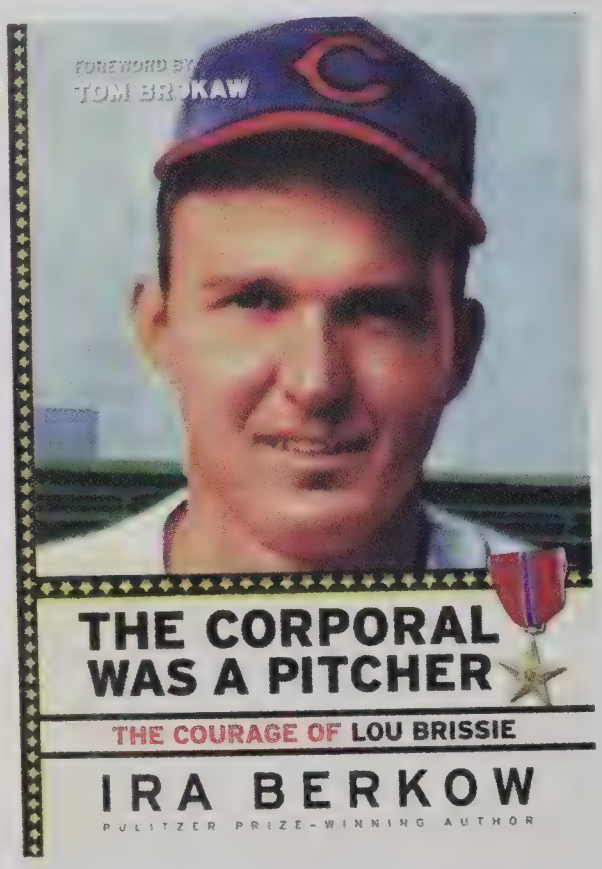
By LTG James L. Campbell
U.S. Army retired

I had the opportunity to meet Warren Spahn, the former pitching ace of the Boston and Milwaukee Braves, at a baseball signing event in upstate New York not long after I reported for duty with the 10th Mountain Division at Fort Drum. I patiently waited in line to meet him, watching as those in front of me asked for his autograph on a ball or photo. When it was my turn to step forward, I told him that I did not have anything for him to sign, but, fully aware of his contributions in the Battle of the Bulge during World War II, I wanted to thank him for serving our country at a time when freedom in the world hung in the balance. As he stood and shook my hand, tears began to well in his eyes. Then this Hall of Fame great, the winningest left-handed pitcher in the game of baseball, a man who had pitched in the World Series to the cheers of thousands of adoring fans, said to me in a voice filled with emotion, "Those were the best of days ... I would have done anything for my boys."

That sentiment shared by Spahn, the feeling that he was part of something much bigger and more important than any personal achievement, and that those who fought by his side meant the world to him, is expressed time and again in *When Baseball Went To War,* a wonderful collection of player profiles







edited by Todd Anton and Bill Nowlin.

Filled with remarkable seldom-seen photographs, *Baseball* focuses primarily on the wartime experiences of such diamond notables as Bob Feller, Yogi Berra, Jerry Coleman, Ted Williams and Monte Irvin. Lesser known, but equally courageous, players like Moe Berg, a backup catcher with the Red Sox who served as a spy during the war; Bert Shepard, a P-38 pilot who lost his right leg but later pitched for the Senators; and Joe Takata, the first soldier killed in action from the famous 100th Infantry Battalion, are also featured, underscoring that each player-turned-serviceman contributed and sacrificed in his own special way. These players who went to war—both those who saw combat and those who filled other important roles to boost morale—felt they were needed in our nation's darkest hour. Baseball and any on-the-field glory would have to wait. To a man, they knew that the war would change the course of history—and they wanted to be part of it.

One of the more remarkable baseball-related stories to emerge from World War II involved a young left-handed pitcher named Leland V. (Lou) Brissie. A highly regarded prospect coveted by Connie Mack of the Philadelphia Athletics, Brissie enlisted in the Army when he came of age one year after the attack on Pearl Harbor.

Serving as an infantry squad leader in the 88th Infantry Division, he was seriously wounded in a German artillery attack on his convoy near Bologna, Italy, on December 7, 1944. Both of his feet and his left ankle were broken, and shrapnel shattered the bones in his lower left leg into 30 pieces. Only his personal pleas to the doctors to give him the chance to pitch again prevented amputation of his leg.

In *The Corporal Was A Pitcher,* Ira Berkow details Brissie's long and difficult battle with rehabilitation and unrelenting pain. He describes Brissie's determination and resiliency in overcoming multiple operations and setbacks to not only pitch at the major league level, but to be named to the 1949 American League All-Star squad.

While this is an enjoyable baseball book, providing interesting and often humorous insights into some real characters of the game, as well as an enjoyable game-by-game account of the hotly contested 1948 American League pennant race, it is much more a tribute to the personal courage and pure will of one man who succeeded against the toughest possible odds. Brissie was admired and respected by both his teammates and opponents, not only for his fastball, but for his guts. Never outwardly complaining, never asking why this had happened to him, he considered himself extremely fortunate to have survived the war to be able to play the game of baseball.

***LTG James L. Campbell**, USA Ret., is the chief of staff for MPRI, based in Alexandria, Va. He served more than 36 years in the Army, retiring in 2008; his final assignment was director of the Army Staff in the Pentagon.*

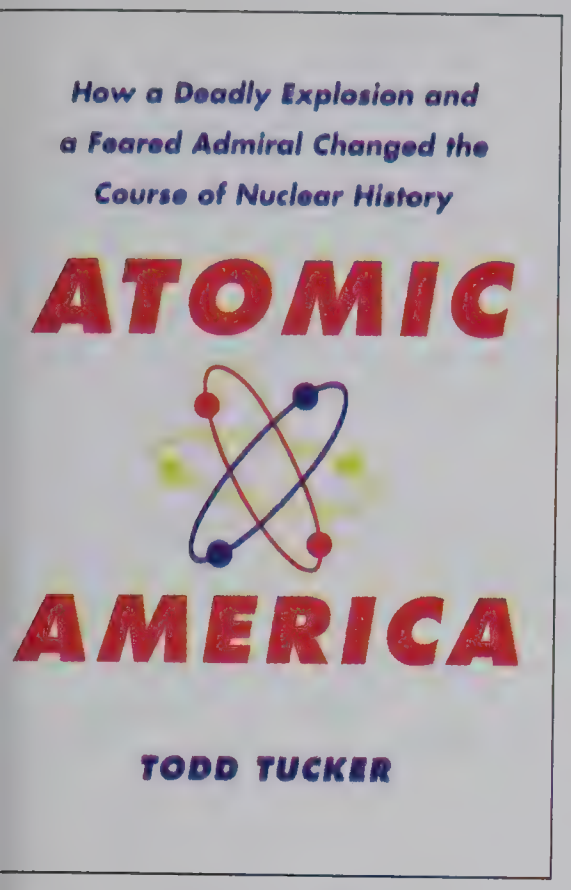
Varied Fare

Atomic America: How a Deadly Explosion and a Feared Admiral Changed the Course of Nuclear History. *Todd Tucker. Free Press. 288 pages; index; $26.*

As global interest grows in finding viable alternatives to oil- and coal-powered energy, many are encouraging a greater reliance on nuclear power. Todd Tucker's *Atomic America* chronicles the early days of America's nuclear power program, interspersing the story of each military service's progress in the race to build nuclear plants and arms with an examination of the events of January 3, 1961, when nuclear reactor SL-1 exploded in Idaho, killing three crewmen.

"Nuclear power was the younger sibling of the atomic bomb," Tucker writes in the prologue. "If the atomic bomb was the ultimate weapon, a risk to civilization itself, then atomic energy must be an energy source of unlimited beneficence, the power to uplift all of mankind." This thinking fueled the billions of dollars spent by the government on researching the new technology. Ironically, ADM Hyman G. Rickover, "the father of the nuclear Navy," viewed nuclear powe with none of the rosy optimism of th time. His mistrust led to his ironcla enforcement of the stringent safet procedures he himself had writte which have resulted in "the Navy perfect [nuclear] safety record over 5 years and hundreds of reactors."

Unfortunately, the Army's prograr was not so diligent. Tucker outlines th rise and fall of the Army's ill-fated e forts to create self-sufficient, portab reactors that could fuel Cold War lin of defense in the Arctic, a sort of nucle Maginot Line that the launch of Sputn rendered obsolete virtually overnigh



The Army began construction of a ew prototype anyway, named SL-1 nd built in the Idaho desert. This pro- type was different from its predeces- r, SM-1, in that it used a boiling-wa- r reactor—"in some ways inherently ss stable than pressurized reactors"— ad was built without a containment uilding to make it somewhat similar what would be used in the far north. he plant went critical in August 1958, t exploded little more than two years ter in circumstances that are still shrouded in conjecture, both scientific and personal. Tucker debunks the enduring myth that one of the crewmen—Jack Byrnes—set off the reactor to exercise revenge on one of the other men, reputedly having an affair with Byrnes' wife. What is undeniably clear is that the demise of SL-1 led to the end of the Army nuclear power program.

Atomic America does an excellent job of weaving the events of the military nuclear arms race together with the accident at SL-1, explaining the science clearly and competently, portraying the major characters and highlighting some of the odder aspects along the way, including Camp Century, a secret Army base dug into the icy wastes of Greenland. Today, when "people on both sides of the nuclear power debate anticipate an atomic renaissance in America" and with 104 nuclear power plants built and 32 more planned, *Atomic America* provides a vital service in clarifying what went wrong at SL-1 (and what went right under ADM Rickover's tenure). In addition, Tucker has achieved the difficult task of entertaining as he enlightens: *Atomic America* is a gripping narrative as well as a clearheaded caution as we enter what perhaps will become the era of atomic precedence.

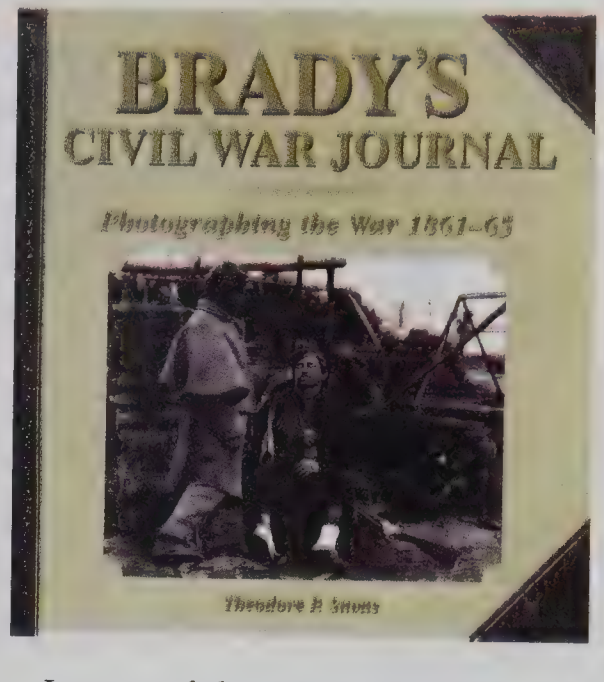
—Sara Hov



"Did you see the latest pictures from Mars?"

Briefly Noted...

Brady's Civil War Journal: Photographing the War 1861–65. *Theodore P. Savas. Skyhorse Publishing. 256 pages; index; black-and-white photographs; $24.95.*



Images of the wars in Iraq and Afghanistan flood the media, and soldiers posted overseas can even upload videos of themselves to the Internet. It wasn't always this way, of course.

During the Civil War, Mathew Brady and his photographers met the ambitious goal of recording the reality of battle in photographs of such clarity and number that they have forever changed the way in which those far from the front lines experience war. The fascinating selection of more than 250 photographs in *Brady's Civil War Journal* allows today's readers access to the same harrowing realities that informed 19th-century viewers, who had been accustomed to cheery, heroic illustrations in newspapers.

Divided by subject matter into groups such as personalities, Army life, battlefields, prisoners and hospitals, the restored photographs, accompanied by Theodore Savas' commentary, depict the destruction of soldiers, edifices and land.

Especially interesting are images of the many fallen soldiers, Virginia's Libby Prison, various railway bridges that were demolished and rebuilt, and fugitive slaves crossing the Rappahannock River.

Historically Speaking

178 Streamers

By BG John S. Brown
U.S. Army retired

June 14, 2009, marks the 234th birthday of the United States Army. Many of us will at some point on that day be in the presence of the Army flag, which proudly bears streamers representing 178 officially recognized campaigns. Unit flags are likely to be present as well, bearing streamers for which the unit has earned campaign credit. And of course there are the ribbons worn by veterans, miniature counterparts to the streamers that acknowledge service to our country. Since 1921, campaign streamers as we know them have reminded us of the courage, competence and sacrifice of our soldiers. Before that time, ribbons, engraved silver bands or names embroidered directly into the colors served the same purpose. Thumbing through the campaign streamers on an Army flag reveals the awesome breadth of military heritage.

The streamers reflect our military history as it evolved: 16 for the Revolutionary War, six for the War of 1812, 10 for the Mexican War, 25 for the Civil War, 14 for the Indian Wars, three for the Spanish-American War, 11 for the Philippine Insurrection, 13 for World War I, 38 for World War II, 10 for Korea, 17 for Vietnam and 15 for expeditionary combat outside the framework of major wars. Interestingly, of the 15 streamers awarded for this miscellaneous expeditionary combat, nine reflect events since the end of the Cold War in 1989.

The geographic scope of the campaigns is impressive. Fifty-nine campaigns were fought within what is now the United States, 14 elsewhere in North America, four elsewhere in Latin America, 28 in Europe, 28 in the Pacific, 40 on the continent of Asia and three in Africa. Two, the World War II Antisubmarine Campaign and the ongoing war on terrorism, defy precise geographical categorization. We have been characterized as a Eurocentric power, but we have spent more than three times as much time fighting in Asia and the Pacific, even before our current commitments in Afghanistan and Iraq.

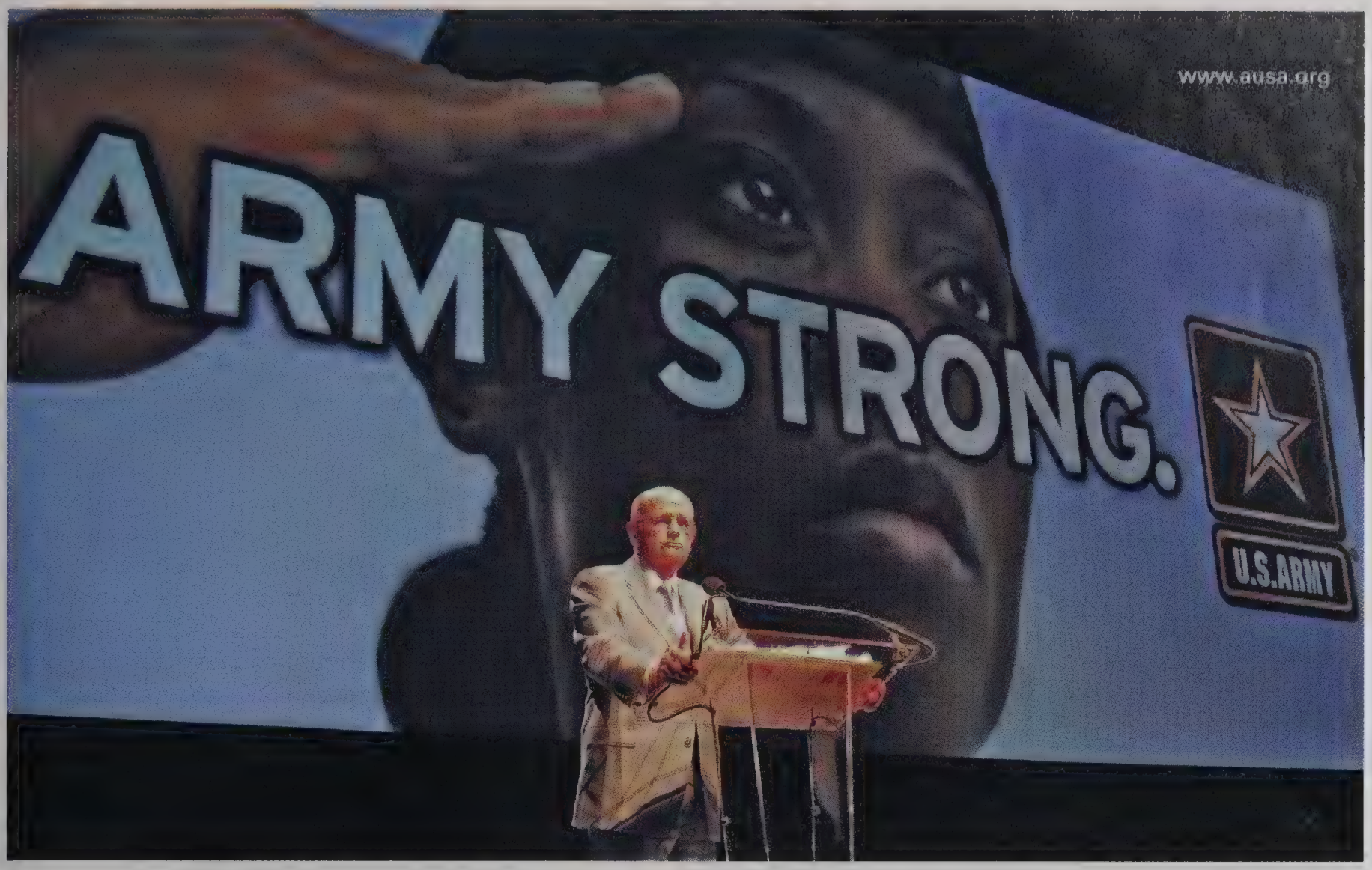
Our campaign streamers represent dedicated service and usually—about 90 percent of the time—victory. Twenty campaigns are best characterized as defeats for the United States: one loss to the Chinese in the winter of 1950–51, three to the Japanese in 1941–42, six to the British prior to 1815 and 10 to the Confederate States of America. Many National Guard units from south of the Mason-Dixon Line are allowed to interpret these statistics a bit differently. They were on the winning side in the 10 Civil War campaigns won by the Confederacy, but on the losing side in the 10 campaigns won by the Union. Five Civil War campaigns are probably best characterized as a draw. It also seems fair to characterize the campaigns against the Seminoles and Pancho Villa as draws as well. For those who believe wars originate in profound cultural differences, it may be instructive to note that 80 percent of our defeats were inflicted by people who speak English.

Ironically, none of the 17 campaigns in Vietnam is properly characterized as a defeat for the United States. In each case, campaigns were defined by parameters, and objectives were generally achieved. The last ended in January 1973, shortly after the massive defeat of the 1972 North Vietnamese invasion and the subsequent withdrawal of the few remaining American combat units. This phenomenon may support those who characterize Vietnam as a war we "walked away from" rather than "lost." It also fits with the story of an American officer who commented to a North Vietnamese counterpart that we never lost a battle to them. The North Vietnamese officer affirmed that this was true, but also irrelevant.

The largest campaign we ever fought was the final battle for Central Europe beginning on March 22, 1945. By that time, GEN Dwight D. Eisenhower commanded more than 4.5 million troops whose organization included 91 combat divisions, of whom two-thirds were American. The bloodiest campaign was that for the Rhineland from September 14, 1944, to March 21, 1945, which included savage fighting in appalling conditions for bridges across Holland, the Siegfried Line, Aachen, Metz, the Huertgen Forest, the Vosges, the Roer and innumerable villages captured to close and cross the Rhine River. The prolonged grind cost more



Since 1921, campaign streamers have reflected the Army's battlefield heritage. In 1994, the Army flag bore streamers representing 172 campaigns.



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U.S. Army/SSG Roger M. Dey

In 2007, 1st Battalion, 163rd Infantry Regiment, Fort William Henry Harrison, Mont., rededicated streamers of their World War II predecessors and added others for Operation Iraqi Freedom and the war on terrorism.

than 200,000 casualties, and had more than 100,000 more from the Ardennes-Alsace Campaign geographically and temporally embedded within it. The six campaigns north of the Alps from D-Day to V-E Day cost almost 600,000 American casualties, including 136,000 dead. This gigantic contest incorporated our largest and bloodiest campaigns, but the Civil War arguably still accounts for our most intense. At the Battle of Cold Harbor in Virginia, the U.S. Army lost 12,000 men in a single day, and at Gettysburg more than 20 percent of the soldiers present became casualties.

Discounting campaigns that are not yet concluded, our longest continuous campaign was that against the Comanches, from 1867 through 1875. For nine long years, our soldiers contested vast tracts of Texas, New Mexico, Kansas and Colorado with their adversaries. Flouting the convention of the times, fighting went on summer and winter to wear down the mobile and terrain-wise Comanches. As long as the campaign against the Comanche people was, the campaign streamer for the Seminoles represents an even longer span of time. It combines campaign credit for scattered episodes of combat and active operations stretching from November 1817 through May 1858. Dramatic events included the loss of a contingent under CPT Francis Dade at a cost greater than that of the more famous Little Bighorn.

There are a number of candidates for the shortest campaign. Twenty-one streamers were awarded for the events of a single day. Virtually all of these date from before the Civil War and a time when conventional operations tended to be the "day of battle," and contributions towards victory could be measured on that day. Of these days of battle, the most economical seems to have been executed by GEN George Washington at Trenton, N.J., in 1776. He attacked at 8 o'clock on the morning after Christmas and accepted the Hessian surrender an hour and a half later.

The history of the U.S. Army is still being written, of course, and there will be more streamers. Single streamers that now exist for Iraq, Afghanistan and the war on terrorism could justifiably be broken into phases. Foreign correspondent Richard Engel makes the interesting argument that there will have been six phases in Iraq: shock and awe (March–April 2003), nation-building (2003–04), insurgency (2004–05), civil war (2006–07), the surge (2007–08) and our exit (2009–11). Whether his characterizations hold up remains to be seen, but it has been our habit to refine our appreciation of sacrifices made and periods served during lengthy wars. We do not yet have streamers for Somalia Haiti or Bosnia, which seem to me to be omissions.

I remember being astonished by a beloved Sunday school teacher's insistence that, rather than simply reciting the Lord's Prayer, I should think about each word and what it meant. By analogy, when the Army's birthday brings us into the presence of Army flags and their streamers, we might think beyond the colorful embroidery to the millions of individual sacrifices and rich historical heritage they represent. A birthday is, after all, a time for remembrance. ★

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University.*

Recommended Reading:

Hartzog, GEN William W., *American Military Heritage* (Washington, D.C.: Center of Military History, 2001)

Hogan, David W. Jr., *Centuries of Service: The U.S. Army, 1775-2005* (Washington, D.C.: Center of Military History, 2005)

Stewart, Richard W., ed., *American Military History, Volumes I and II* (Washington, D.C.: Center of Military History, 2005)

"The Army Flag and Its Streamers" (Washington, D.C.: Center of Military History, www.history.army.mil/html/reference/army_flag/index.html, 2009)

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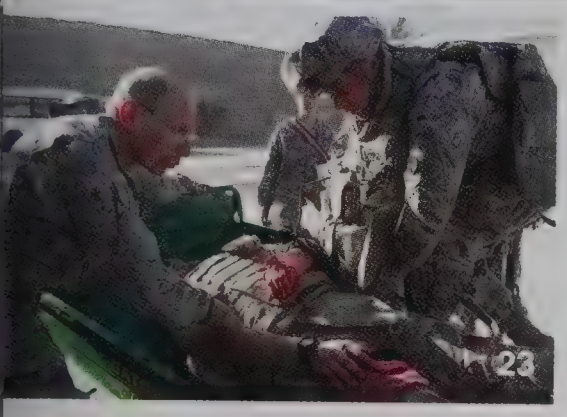
Too Much From Too Few *By GEN Frederick J. Kroesen, USA Ret.* ***Page 14***

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CCMRF and Use of Federal Armed Forces in Civil Support Operations *By MG Jeffrey A. Jacobs, U.S. Army Reserve* ***Page 16***

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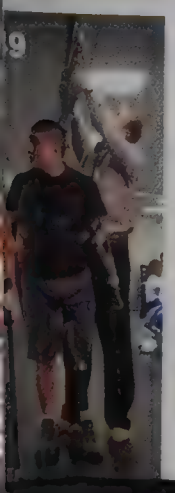
FEATURES













AMEDD: Keeping the Army Fit to Fight *By LTG Eric B. Schoomaker*
Staffed by more than 70,000 professionals, the U.S. Army Medical Department performs critical missions worldwide, from treating and healing sick and wounded soldiers to protecting and caring for the Army family. ***Page 23***

The U.S. Army Institute of Surgical Research *By Scott R. Gourley*
As DoD's premier combat casualty care, research, trauma, burn and critical-care center, the U.S. Army Institute of Surgical Research has fielded advanced equipment and developed new treatments to support the medical needs of combat soldiers and their families. ***Page 31***

Advanced Black Hawks Replace Medical Company's Squadron of Huey Air Ambulances *By Jerry Duncan*
Built for survivability, speed and size, the UH-60 Black Hawks will soon replace the reliable Vietnam War-vintage UH-1 helicopters of the Wisconsin Army National Guard's 832nd Medical Company (Air Ambulance). ***Page 37***

Saving Lives in Afghanistan *Text and Photographs by Paul Avallone*
Embedded nine months with a unit in a remote part of Ghazni Province, Afghanistan, Paul Avallone chronicles some of the daily lifesaving tasks performed by the staff of a combat support hospital at Forward Operating Base Salerno. ***Page 44***

Combat Injuries Spur Medical Innovations *By Toni Eugene*
Combat casualties in Iraq and Afghanistan have inspired advances in medical technologies and treatments, particularly the area of prosthetics, for which the advice and suggestions of wounded warriors have proved invaluable. ***Page 49***

Best Sapper 2009 *Text and Photographs by Dennis Steele*
Thirty-four teams of Army Engineers go head to head in the grueling 52-hour-long Best Sapper Competition at Fort Leonard Wood, Mo. ***Page 54***

The Western Hemisphere Institute for Security Cooperation Provides International Training *By LTC Lee A. Rials, USA Ret.*
The Western Hemisphere Institute for Security Cooperation, operated and managed by the Army at Fort Benning, Ga., offers a wide variety of military and law-enforcement courses to train and educate professional security officers from nations throughout the Western Hemisphere. ***Page 67***

CompanyCommand—Building Combat-Ready Teams: Supporting a Combat Veteran's Family
In response to an Army mom's e-mail seeking advice on how to help her redeploying son adjust to civilian life after 15 months in Iraq, combat veterans offer their thoughts, share their experiences and recommend various means of support. ***Page 71***

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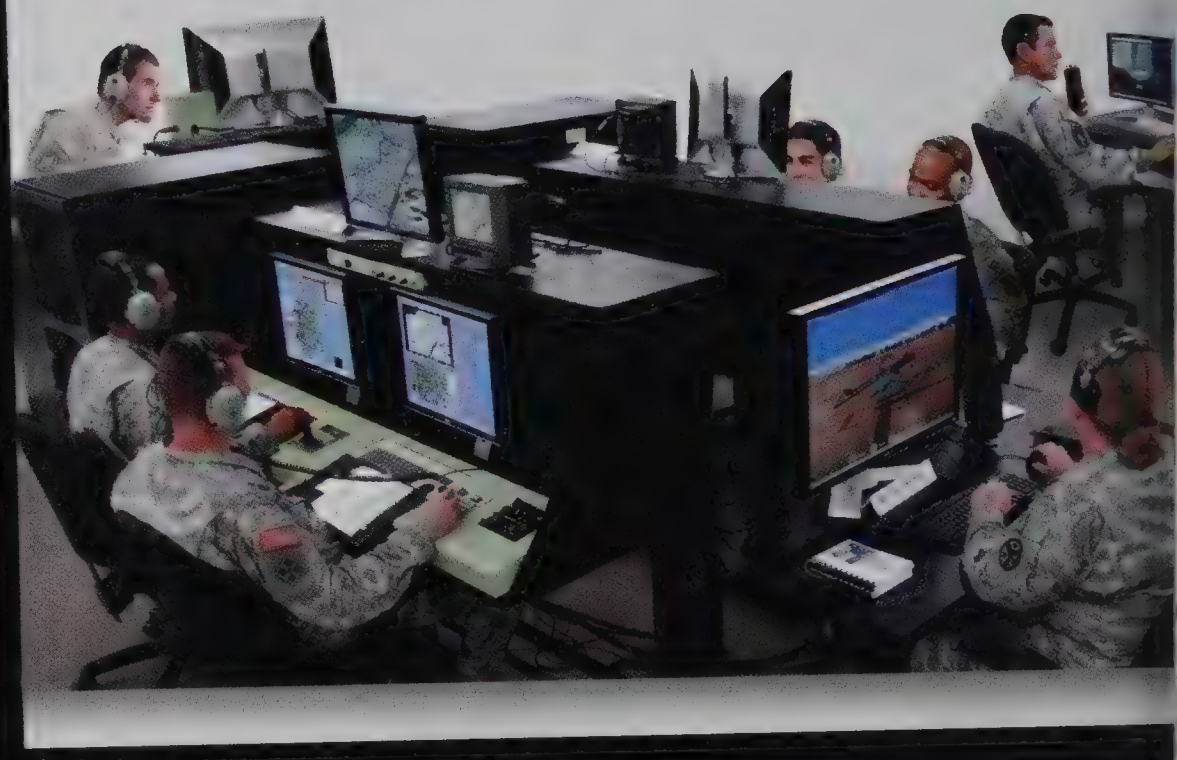
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Letters

Preserving Veterans' Experiences

■ Recently, I've seen editorials in a few publications urging family members of military personnel to record the wartime experiences of their loved ones in order to preserve them as a part of the family's history. I agree with the idea wholeheartedly; my family recently began a tradition of videotaping interviews with family members during holiday gatherings. We plan to work our way through each member of the family—which includes war veterans—until we have a full library of everyone's experiences, told in their own voices. I believe every family should do this.

What's more, it's imperative that we maintain a narrative of our nation's history from the veteran's perspective. History books will never be able to adequately relate the "boots on the ground" experience of the individual soldier. Each of us has a different point of view, a unique perspective of our wartime experience. The emotions, anxieties and fears of combat are different for each person. If we don't chronicle our veterans' personal experiences, we as a nation stand to lose a vital piece of our history.

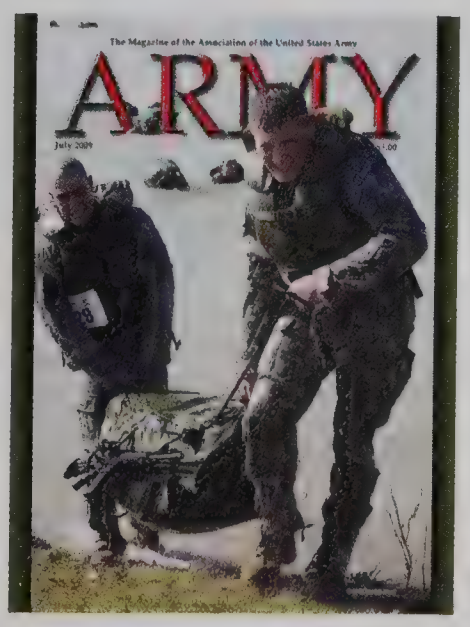
I see no better opportunity to revive the original intent of Memorial Day and Veterans Day than to begin interviewing and capturing your own family members' military experience in print, video, audio and/or photographs. Most of us have Korean War, Vietnam War and Gulf War veterans whom we can interview; a lucky few of us may still have veterans of World War II who are able and willing to share their experiences. Equally important is the new generation of combat veterans with stories of the war on terrorism. It may not be easy for them to talk about their deployment, but if they are able to share their stories, their memories will be part of a national treasure.

MAJ DUDLEY R. CAPPS
Leavenworth, Kan.

'Pulling Teeth'

■ The frustration expressed by 1LT Kevin Bell in his article "Pulling Teeth: An Infantry Platoon Leader's Perspective On a Year in Afghanistan" (May) is familiar. I spent 24 months in Afghanistan (2005–07) working with the Afghan Ministries of Defense and Interior before moving on to assist the Afghan National Army (ANA) as it struggled to field (equip, staff, train) a reformed air corps. We operated within the reality that our work in Afghanistan was part of the supporting/shaping efforts of a war with its main effort in Iraq and that resources were commensurate with our status.

Nonetheless, we knew that we could make great progress toward a re-



This Month's Cover

SPC Anthony Jimenez and PFC Ryan Ray, representing the 57th Engineer Company, 27th Engineer Battalion, Fort Bragg, N.C., emerge from the water during the helocast/swim event of the 2009 Best Sapper Competition held at Fort Leonard Wood, Mo. The fifth annual Best Sapper Competition—spanning three days and consisting of 31 separate events—drew 34 starting teams from throughout the Army to vie for the title. The winning team was 1LT Shawn Hogan and MSG Michael Behkendorf, representing the 7th Engineer Battalion, 20th Engineer Brigade, Fort Drum, N.Y.

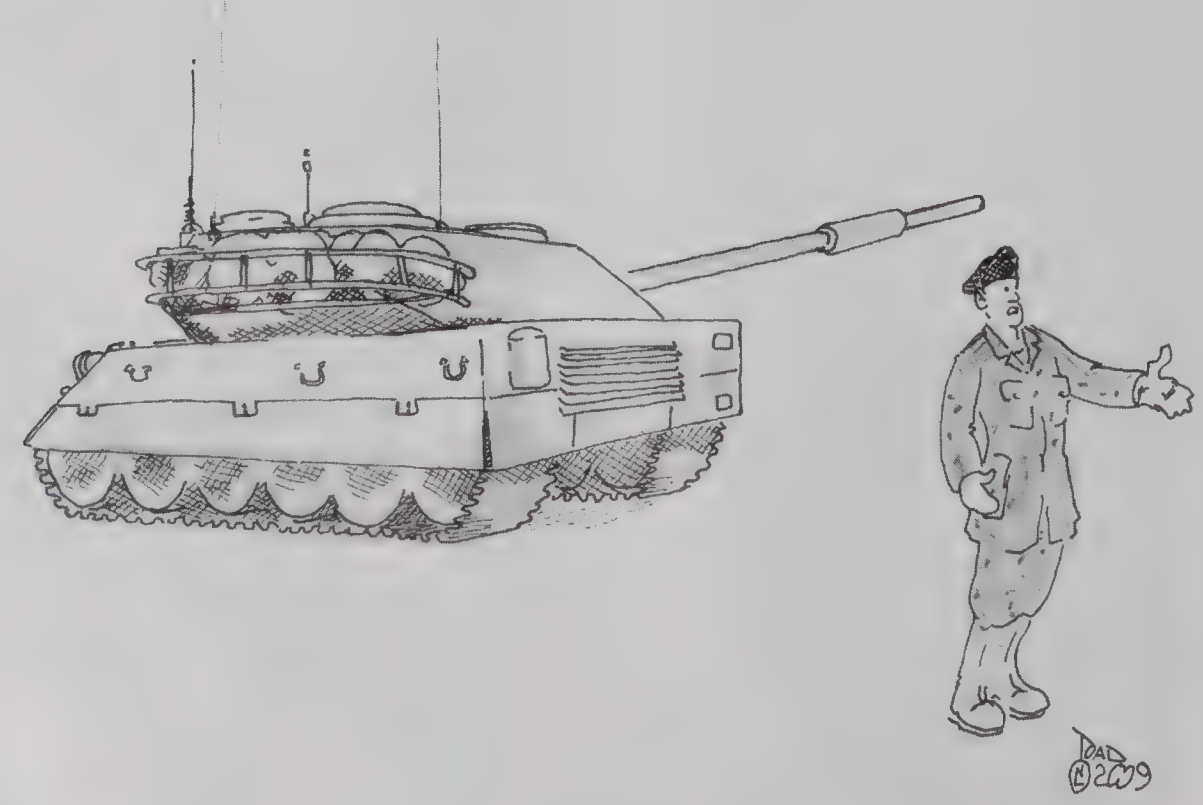
(Cover photograph by Dennis Steele)

formed and viable Afghan security sector despite limited resources by adhering to two key principles. First, every issue must have an Afghan-designed-and-implemented solution. Such solutions would have the best chance to endure because of a sense of ownership. Second, every time we (United States/International Security Assistance Force) "do it" for them, we succeed in building an undesirable dependency that ultimately extends our stay. The first principle required great patience; the second, great restraint. If we met with local civilian leaders, there was an Afghan leader (often the air corps commander) leading the discussion. Doctrine, policy and force structure documents that ultimately made it through the bureaucracy of the Afghan general staff and ministries did so because they were crafted by the Afghans. If it was "our idea," the Afghans would express gratitude, curiously observe and do little to push adoption. Furthermore, there would be little interest at Afghan action-officer levels behind the scenes (where progress can be made despite the bureaucracy), since they had only superficial buy-in. The result—pulling teeth.

First Lieutenant Bell confirms for me that we are relearning many lessons. Eight years into this fight, we are still sending U.S. platoons to villages to do Afghan police work; we're still really operating with the Afghans marginalized. As we shift the main effort to Afghanistan and apply the resources that such a shift warrants, we need to increase the quality of training and equipment given to the ANA and Afghan National Police. We need to fully integrate the ANA into the Combined Task Force and other multinational formations. Most importantly, we must get the Afghans out front in all endeavors. It's where they want to be anyway. The G-3 of the Afghan Air Corps, within which my team was embedded, would implore that "Afghans are greatly appreciative for U.S. support but not for our blood—we Afghans are fighters."

COL JOHN T. HANSEN
Waipahu, Hawaii

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Posse Comitatus

■ I just finished reading "Resurrecting *Posse Comitatus* in the Post-9/11 World" by COL Craig Trebilcock in the May issue ("Front & Center"). As a retired old-timer, my view of the Posse Comitatus Act was that it essentially restricted use of U.S. Army or Air Force units in domestic disturbances. That mission was primarily one for the National Guard.

I was completely unaware of the significant changes to this venerable legislation until reading COL Trebilcock's article. Although I accept the political impact of events such as 9/11 and Hurricane Katrina, the idea that U.S. Army combat units may now become involved in confronting American citizens in domestic disturbance raises deep concerns within this old soldier.

I believe this dramatic change in Posse Comitatus demands greater public debate and surely inclusion in the curriculum at service colleges and officer training schools. This change could bring about a far different relationship between the American citizenry and its Army, and not for the better.

COL ERIK G. JOHNSON, USA RET.
Kilmarnock, Va.

■ My compliments to COL Trebilcock on his article. I sincerely echo his concerns regarding the constitutional issues he cites.

I would like to take issue, however, with several points in his article, first by contesting his claim that blame lies primarily with the Bush administration for the purported demise of the Posse Comitatus Act. This is clearly not the case.

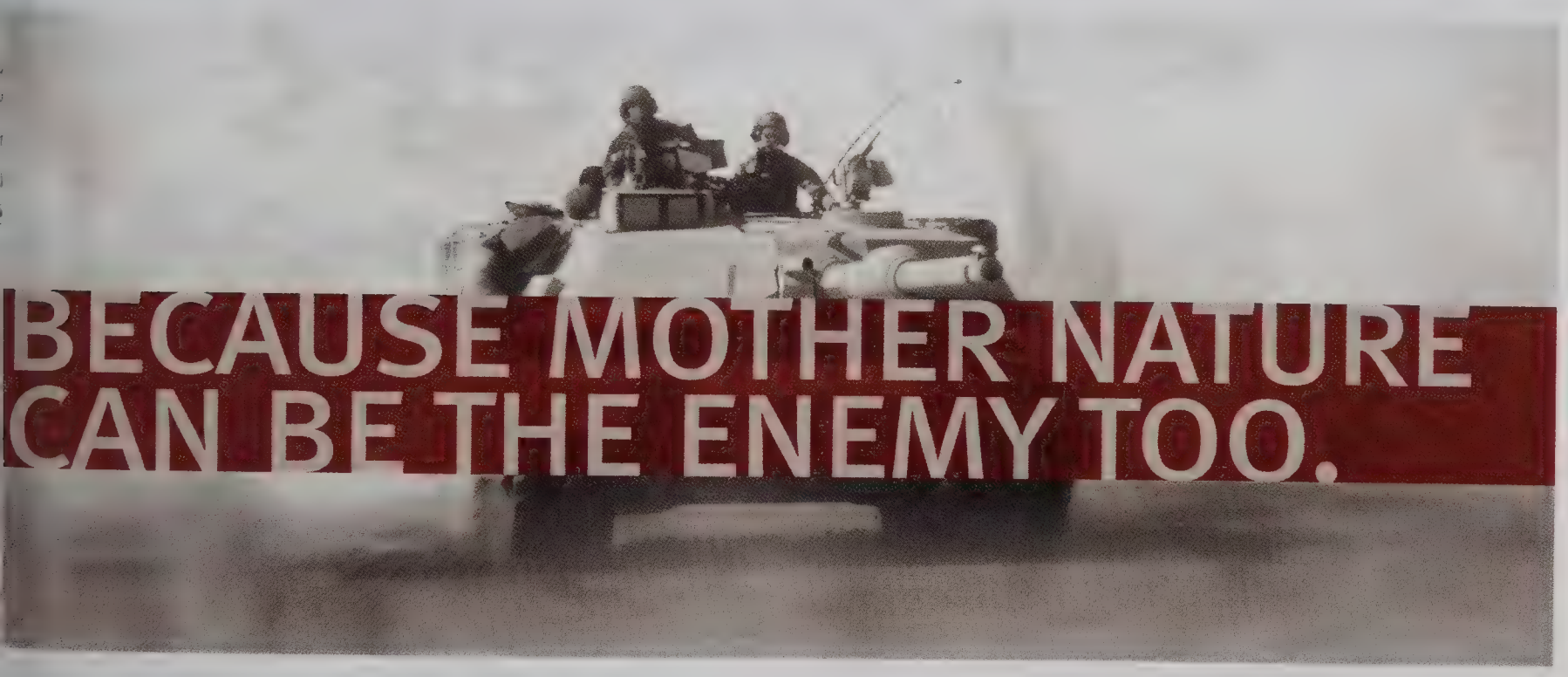
There have been many occasions over several decades (since Reconstruction) and under many administrations when federal troops have been used to augment civil authority a

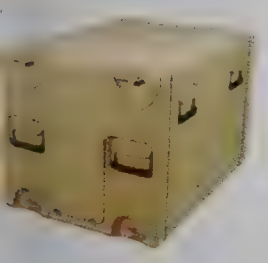
aw enforcement. The instances are too umerous to mention, but I suspect nany of us can recollect many occaions in recent history when active uty military and federalized National Guard forces have been used during atural disasters, search and rescue, order surveillance, and other continency response operations. Military xplosive-ordnance-disposal emergeny and public safety services have been rovided in support of federal and ocal law-enforcement organizations roughout the United States for decdes, numbering in untold incident reponses and countless manhours exended in that mission—while Posse omitatus provisions were scrupuusly observed.

COL Trebilcock alludes to "the potical heat President Bush took" in ne Hurricane Katrina episode that rompted his support of modifications the Insurrection Act. While I, too, beeve that this measure posed serious onstitutional issues, one should take ote that this was encompassed in the 007 National Defense Authorization Act passed by Congress with the support of many Democrats. One could write volumes about Congress (and members of both parties) as being most culpable in the erosion of both individual and states' rights under the Constitution—but I won't argue that issue here. The framers of the Constitution believed that a President fulfilled the role of chief magistrate of the United States and in that context "he shall take care that the laws be faithfully executed." President Bush was therefore caught in an interesting dilemma during Katrina; he was obliged to enforce the Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707, signed in 1988.

It is also worth noting that the military response to Katrina included approximately 58,000 federalized National Guard troops and several thousand troops drawn from active duty combat units, under command of U.S. Northern Command (NORTHCOM), and the response included many other members of services outside the NORTHCOM task organization.

COL Trebilcock takes issue with the Bush administration decision to assign to NORTHCOM a dedicated infantry force for potential chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) incident response, suggesting that they might be used in a combat role domestically. Further, COL Trebilcock contends that "Presidents prior to the Bush administration sought to minimize the deployment of active duty military forces within the United States." First, the infantry does have a legitimate role in CBRNE response. Should a CBRNE attack/incident occur, an exclusion zone must be established around immediately affected and downwind hazard areas—this role is performed by a security force, a mission well-suited to CBRNE-trained infantry. Second, the reader should know that the U.S. Marine Corps activated its Chemical and Biological Incident Response Force in 1996, during the Clinton administration; the unit includes a security force. The reader should also note that





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NORTHCOM was established in 2002, but organizational planning occurred during the Clinton administration commencing with responsibilities assigned to federal agencies pursuant to Presidential Decision Directive-62, "Protection Against Unconventional Threats to the Homeland and Americans Overseas," dated May 22, 1998.

LTC EDWARD WOLCOFF, USA RET.
Manassas, Va.

The author replies...

■ I was pleased to see the thoughtful responses to my article on the Posse Comitatus Act in the post-9/11 world. Like most significant policy issues, the path forward is not without costs or controversy. It is clear, however, that policymakers need to consider the second- and third-order effects of integrating the active Army further into our domestic security fabric. The issue is not merely a matter of what makes the best operational sense. It is a choice that will have legal, political and cultural ramifications and define who we are as a nation for decades to come.

The central theme of my article is that a well-reasoned national policy concerning the proper role of employing the Army domestically should drive future operational decisions; the operational decisions from the latest domestic crisis should not become national policy by default. Nor should national policy be the result of a series of uncoordinated policy exceptions to Posse Comitatus, which is what has occurred over the past 30 years. History has demonstrated repeatedly that during times of war and national emergency the values of a nation must be most zealously guarded against erosion in the name of national security. The question we must answer in view of today's complex security challenges is whether we are stronger or weaker as a democratic republic when we increasingly rely on the standing Army, rather than state and local resources, to preserve our liberty.

COL CRAIG TREBILCOCK, USAR
York, Pa.

Note: See page 16 in "Front & Center" for more on this subject.

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Washington Report

Rep. McHugh Tapped for Army Secretary

President Obama has nominated Rep. John M. McHugh R-NY) as the 21st Secretary of the Army. If confirmed by ıe Senate, Rep. McHugh would succeed Secretary Pete ieren, who has served in the position since July 2007.

A nine-term member of the House of Representatives, ep. McHugh became the ranking member (lead Republi-ın) of the House Armed Services Committee in January; he reviously served as the ranking member of the Subcommit-e on Military Personnel. A strong ıpporter of soldiers and military ımilies, he also served as the ıairman of the Total Force Sub-ɔmmittee, which oversees fund-ıg related to military personnel sues, health-care benefits, DoD hools, and morale, welfare and creation programs. In February, e visited military leaders and ɔops in Iraq and Afghanistan.

"The President could not have ade a better choice to serve as ecretary of the Army," said AUSA esident GEN Gordon R. Sullivan, S. Army retired, who has known ıd worked with Rep. McHugh for years. "The Congressman is the ght man at the right time and in the right place to lead this ıtion's largest land fighting force—America's Army—and e thousands of men and women, many serving in harm's ay, who have volunteered to keep us free."

In announcing his selection, the President said Rep. cHugh "is committed to keeping America's Army the st-trained, best-equipped, and best-led land force the orld has ever seen." He noted, too, that the Congress-an's father served with distinction aboard a B-17 bomber ıring World War II, and his mother tended wounded rvicemembers.

For 14 years, Rep. McHugh has cochaired the House of presentatives Army Caucus, a bipartisan group that ɔrks with the Army to increase the visibility of its needs, inform members of Congress of the importance of the tion's conventional capabilities and to assist the Army in esenting its programs to Congress. In 2003, AUSA pre-nted Rep. McHugh with its Outstanding Legislator ward for his service as cochair of the caucus. For 16 years, p. McHugh also has served on the Board of Visitors of e United States Military Academy at West Point. He ew up in Watertown, N.Y., near Fort Drum, home of the th Mountain Division, and the Army base lies in his con-essional district.

The Army, said Rep. McHugh after President Obama made his announcement, "has always had a special place in my heart."

In a statement on his House web site, the Congressman wrote: "I am enormously moved and deeply humbled. … I promise that if I am confirmed by the Senate, I will do everything I possibly can—in concert with Army leadership—to ensure our country has the very best Army it possibly can."

The New York lawmaker is known for his bipartisanship and has joined with Democrats to push for bigger military pay raises and more generous benefits. He also led opposition to Defense Department efforts to dramatically increase TRICARE fees and has supported a large and permanent increase in the size of the Army.

If Rep. McHugh is confirmed, a special election would be held to select his replacement in New York's 23rd Congressional District, and his departure from the House Armed Services Committee could ignite a race for the position of ranking member among Republican committee members.



U.S. Army

Army Chief of Staff GEN George W. Casey Jr. meets with Rep. John McHugh before a House Armed Services Committee hearing. If confirmed, McHugh would be the 21st Secretary of the Army.

DoD Cyber Command. The Department of Defense has announced plans to create a new cyber command that will coordinate the defense of Pentagon computer networks and improve U.S. offensive capabilities. Testifying before a subcommittee of the House Armed Services Committee in May, LTG Keith B. Alexander, director of the National Security Agency, said the new subunified command would fall under U.S. Strategic Command, whose task is to defend against attacks on U.S. vital interests. LTG Alexander is expected to run the new command, which would be headquartered at Fort Meade, Md.

Last year, DoD detected 360 million attempts by hackers and foreign governments to penetrate its networks, up from 60 million attempts in 2006. Military leaders reported that the Pentagon has spent more than $100 million in the last six months responding to and repairing damage from cyber attacks and other computer network problems.

LTG Alexander noted that unlike other warfighting domains—land, sea, air and space—cyberspace is "a man-made technological phenomenon solely reliant upon human activity." What were once distinct and separate communication networks—those of the United States, its allies and its adversaries—have increasingly merged into "one network-of-networks: cyberspace." It is an ever-evolving domain, he said, and one that is "absolutely vital to the nation."

News Call

Afghanistan Update: 'Counterinsurgency Takes Time'

It will take at least 18 to 24 months before the United States can start making progress in Afghanistan, according to GEN Stanley A. McChrystal, who has replaced GEN David D. McKiernan as commander, NATO International Security Assistance Force and U.S. Forces-Afghanistan. In testimony during his Senate confirmation hearing in June, GEN McChrystal said he sees the war there as a long, complex struggle that calls for more than military solutions and demands the support of the Afghan people. "Counterinsurgency takes time," he said.

"Afghans face a combination of challenges—a resilient Taliban insurgency, increasing levels of violence, lack of governance capability, persistent corruption, lack of development in key areas, illicit narcotics and malign influences from other countries," said GEN McChrystal. "There is no simple answer. We must conduct a holistic counterinsurgency campaign and we must do it well."

Critical to success is winning over the population. "This is a struggle for the support of the Afghan people," he said. "Our willingness to operate in ways that minimize casualties or damage, even when doing so makes our task more difficult, is essential to our credibility."

Securing the population and separating them from the insurgents is one of the greatest challenges, a task GEN McChrystal advised is best done by the Afghans. To that end, he cited the need to increase the capacity and strength of Afghan security forces, especially the police. "The measure of effectiveness will not be [the number of] enemy killed; it will be the number of Afghans shielded from violence," he said.

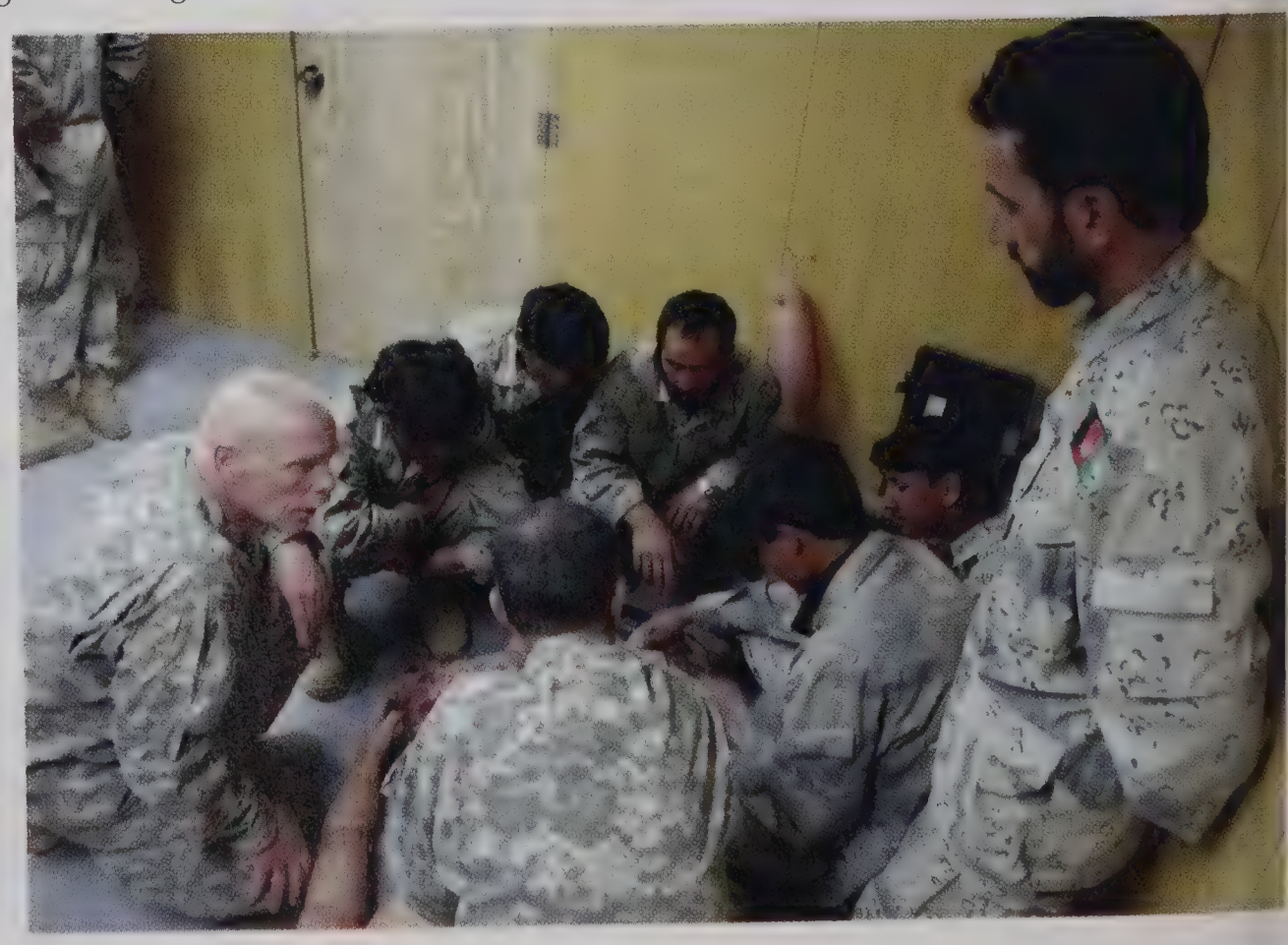
GEN McChrystal said that once on the ground in Afghanistan, he will need to assess the insurgency and create a specific action plan for the more than 21,000 additional troops who are expected to deploy there by October. In addition to improving security, the United States must work to improve governance at every level, he said. A "military-centric strategy will not succeed." GEN McChrystal is working with Ambassador to Afghanistan LTG Karl W. Eikenberry, U.S. Army retired, to develop an integrated civil-military plan that combines efforts across security, governance and development.

Noting that the complex effort in Afghanistan demands experience and continuity, GEN McChrystal said the United States must develop a corps of professionals with expertise in that theater, its languages and its culture. That cadre would be assigned for repeated tours and would remain focused on Afghanistan even when not deployed.

"Success will not be quick or easy," advised GEN McChrystal. "Casualties will likely increase. … With the appropriate resources, time, sacrifice and patience, we can prevail."

Deaths Mounted in Iraq. May was the deadliest month for U.S. troops in Iraq since September. More than 20 servicemembers died, an increase that coincided with a spike in violence as U.S. combat troops prepared to withdraw from cities by June 30 as part of the U.S.-Iraq security agreement.

The number of noncombat fatalities was higher than usual. It included five—an Army psychiatrist, Navy doctor and three enlisted soldiers—who were shot by a fellow servicemember at a combat stress facility at Camp Liberty, Baghdad. SGT John M. Russell



Combat lifesaver. *U.S. Army CPT Paul Rogers, left, a physician's assistant with Brigade Special Troops Battalion, 4th Brigade Combat Team (Airborne), 25th Infantry Division, instructs Afghan border policemen on a condensed version of the combat lifesaver course at Forward Operating Base Salerno in Khost Province, Afghanistan.*

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Lori Egan

Best Rangers. *SFC Blake Simms, left, and SFC Chad Stackpole, both from the 4th Ranger Training Battalion, hold the Colt 45 pistols they received for winning the 26th annual Lt. Gen. David E. Grange Jr. Best Ranger Competition.*

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with the Bamberg, Germany-based 370th Engineer Company, 54th Engineer Battalion, has been charged with the shootings.

SGT Russell was serving his third deployment to Iraq. He had been identified as a stress casualty, and his weapon had been confiscated. After an altercation at the facility, he allegedly took someone else's weapon, returned to the clinic and opened fire. Although the Army has strengthened its program to reduce stress, the killings underscore the need for better mental health care. DoD officials have stated that Multi-National Force-Iraq, U.S. Central Command and the Army will study the Camp Liberty shooting to see what steps should be taken.

Despite the surge in violence, the American death toll remains relatively low. In 2006 to 2007, the number of U.S. fatalities often exceeded 100 a month. BG Keith Walker, commander of the Iraq Assistance Group, told reporters in Baghdad in June that security throughout Iraq has continued to improve. In 2007, attacks averaged 900 nationwide per week; in 2008, the number fell to 200 per week. In the first 22 weeks of 2009, there were fewer than 100 attacks per week.

Suicide Stand-Down. Fort Campbell, Ky., home of the 101st Airborne Division (Air Assault), suspended all regular duties for three days in May so that commanders could identify and help soldiers who are struggling and are at risk for suicide. According to the *Fort Campbell Courier*, 14 Fort Campbell soldier deaths have been identified as suicides or possible suicides this year—the highest number of any U.S. military base.

In a series of addresses, BG Stephen Townsend, deputy commander of the 101st, addressed all of the approximately 25,000 soldiers assigned to the division. "No matter how bad problems seem," he told them, "trust me it is not the end of the world. It will be better tomorrow. Don't take away your tomorrow." Standing on a flatbed trailer in his PT uniform, the general emphasized the far-reaching effects of suicide. He urged soldiers fighting s



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Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from May 1 to May 31, 2009. All names have been released through the Department of Defense; families have been notified.

SSG Randy S. Agno, 29
SPC Omar M. Albrak, 21
1LT Leevi K. Barnard, 28
SPC Jacob D. Barton, 20
SGT Paul F. Brooks, 34
SGT Christian E. Bueno-Galdos, 25
SPC Chad A. Edmundson, 20
MAJ Jason E. George, 38
PVT Justin P. Hartford, 21
MAJ Matthew P. Houseal, 54
MAJ Steven Hutchison, 60
SGT Christopher D. Loza, 24
SPC Jeremiah P. McCleery, 24
CPL Ryan C. McGhee, 21
SFC Brian Naseman, 36
SPC David A. Schaefer Jr., 27
SPC Shawn D. Sykes, 28
SPC Jake R. Velloza, 22
PFC Michael E. Yates Jr., 19

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from May 1 to May 31, 2009. All names have been released through the Department of Defense; families have been notified.

CW3 Brent S. Cole, 38
SSG Esau I. De la Pena-Hernandez, 25
SPC Ryan C. King, 22
SGT Carlie M. Lee III, 23
SGT James D. Pirtle, 21
1SG Blue C. Rowe, 33
SPC Lukasz D. Saczek, 23
SSG William D. Vile, 27

cidal thoughts to turn to their leadership and for all soldiers to be on the lookout for those who show signs of committing suicide.

"Don't hesitate to seek medical attention for a psychological injury," BG Townsend said. Soldiers can get counseling anonymously; their privacy will be protected. BG Townsend plans to keep suicide prevention a top priority at the base and to continue meeting with groups of soldiers. In addition, Fort Campbell has appointed a suicide prevention coordinator—the first on a U.S. military base.

The suicides that prompted the stand-down at Fort Campbell are part of an Army-wide problem. A record 143 soldiers killed themselves in 2008, a 21 percent jump from the previous year and the highest number since the Army began tracking the figure in 1980. By mid-March 2009, 48 soldiers had committed suicide; at that rate, Army suicides in 2009 would number more than 200. Army leadership acknowledges that stress resulting from long and frequent deployments contributes to the figures. It is not the complete answer, however; 2008 statistics reveal that more than a third of those who killed themselves had no deployment experience.



U.S. Army / SGT Gustavo Olgiati

Medical attention. *U.S. Army SGT Craig Wayman puts eyedrops into an Iraqi girl's eye during a combined medical evaluation in a village in Kirkuk, Iraq, in May. SGT Wayman is a combat medic attached to Troop C, 4th Squadron, 9th Cavalry Regiment, 2nd Heavy Brigade Combat Team, 1st Cavalry Division.*

V Corps Retirement Delayed. The Army announced in June that this month's planned inactivation of V Corps and conversion of U.S. Army Europe Headquarters into a deployable field army headquarters will be delayed until July 2010. According to the DoD release, the decision, which will allow time for the Army to assess its overall command-and-control requirements, "is part of a larger effort to relieve the extraordinary demands that are being placed on the Army's corps headquarters and that have reduced 'dwell time' to unacceptably low levels."

The delay does not affect the mergers of staff sections effected last year, nor is it tied to any other force structure or stationing issues. "Both V Corps and U.S. Army Europe Headquarters will continue to operate under their current structures," the release stated.

Petraeus Honored. GEN David H. Petraeus, commander of U.S. Central Command, was awarded the William J. Donovan Award by the Office of Strategic Services (OSS) Society in Washington, D.C., in May. The OSS was the forerunner of the CIA and U.S. special operations forces.

MG John K. Singlaub, USA Ret., 2007 Donovan Award recipient and OSS Society chairman, presented the award, noting that it honors an "individual who has rendered distinguished service in the interests of the democratic process, public service, courage in all its forms, and the cause of freedom," and has exemplified these features of OSS founder Major William (Wild Bill) Donovan's career.

Army Inspired Immunologist. Dr. Henry N. Claman, whose Army service first interested him in immunology,

GENERAL OFFICER CHANGES*



LTG D.L. Via from CG, CE-LCMC and Fort Monmouth, Fort Monmouth, N.J., to Dir. C4 Systems, J-6, Jt. Staff, Washington, D.C.



MG Y.J. Fontaine from CG, 21st TSC, USAREUR and Seventh Army, Germany, to CG, ASC, Rock Island, Ill.



MG J.W. Hammond from CG, 4th Infantry Div. (M), Fort Hood, Texas, to CoS, FORSCOM, Fort McPherson, Ga.



MG R.A. Hernandez from Chief, USMTM Saudi Arabia, CENTCOM to Asst. Dep. CoS, G-3/5/7, Washington, D.C.



MG S.R. Layfield from CG, USARAK/Dep. Cmdr., ALCOM, Fort Richardson, Alaska, to Cmdr., JWFC/Dir., Jt. Training, USJFCOM, Suffolk, Va.



MG R.P. Lennox from Asst. Dep. CoS, G-3/5/7, to Dir., QDR, ODCS, G-8, Washington, D.C.



MG C.D. Luckey, USAR, from Chief, Office of Scty. Cooperation, MNSTC-I, OIF, Iraq, to Asst. to the Chmn. of the JCS for Reserve Matters, Office of the Chairman JCS, Washington, D.C.



MG T.P. McHale from Dir., Security Agreement Secretariat, MNF-I, OIF, to Dir., Log. Ops., DLA, Fort Belvoir, Va.



MG J.W. Morgan III from CG, 2nd Infantry Div., Eighth U.S. Army, Korea, to CoS, EUCOM, Germany.



MG R.M. Radin from CG, ASC, Rock Island to Asst. Dep. CoS, G-4, Washington, D.C.



MG R.P. Strong from Dir. of AONS, OCIO/G-6, Washington. D.C., to CG, CE-LCMC and Fort Monmouth.

Brigadier Generals: **D.P. Anson,** USAR, from Cmdr. (TPU), 3rd Bde. (BCTB), 75th Div., Fort Sheridan, Ill., to Dir. of Legislative Affairs (IMA), Internal Military Affairs, USSOCOM, MacDill AFB, Fla.; **W.G. Beard,** USAR, from Cmdr. (TPU), 351st CAC, Mountain View, Calif., to Dep. CG for Civil Capacity, MNC-I, OIF, Iraq; **M.S. Bowman** from Dir., J-6, CENTCOM, MacDill AFB to Dir. of AONS, OCIO/G-6.; **D.S. Elmo,** USAR, from Cmdr. (TPU), 1st Mission Spt. Cmd., Fort Buchanon, Puerto Rico, to Dep. Cmdr. and AR Component Integration Advisor (IMA), SETAF, U.S. Army Africa, Vicenza, Italy; **C.W. Hooper** from Defense Attaché, China, Beijing, China, to Dep. Dir. for Strategic Planning and Policy, J-5, PACOM, Camp H.M. Smith, Hawaii; **J.M. McDonald** from Dep. CG, III Corps and Fort Hood to Dir., Security Agreement Secretariat, MNF-I, OIF; **P.E. McQuistion** from Cmdr., Defense Supply Center, DLA, Columbus, Columbus, Ohio, to CG, 21st TSC, USAREUR and Seventh Army, Germany; **W.E. Phipps Jr.** from Dep. Cmdr./Asst. Comdt., USAACE, Fort Rucker, Ala., to Dep. CG, 101st Abn. Div. (AA), Fort Campbell, Ky.; **T.J. Richardson** from Dir. for Log., Engineering and Scty. Assistance, J4 PACOM, Camp H.M. Smith to Cmdr., Defense Supply Center, DLA, Columbus, Ohio.

***ALCOM**—U.S. Alaskan Cmd.; **AONS**—Architecture, Operations, Networks and Space; **AR**—Army Reserve; **ASC**—U.S. Army Sustainment Cmd.; **BCTB**—Battle Cmd. Training Brigade; **CAC**—Civil Affairs Cmd.; **CE-LCMC**—U.S. Army Communications-Electronics Life Cycle Management Cmd.; **CENTCOM**—U.S. Central Cmd.; **C4**—Cmd., Control, Communications and Computer; **DLA**—Defense Logistics Agency; **EUCOM**—U.S. European Cmd.; **FORSCOM**—U.S. Army Forces Cmd.; **IMA**—Individual Mobilization Augmentee; **JCS**—Joint Chiefs of Staff; **JWFC**—Joint Warfighting Center; **MNC-I**—Multi-National Corps-Iraq; **MNF-I**—Multi-National Force-Iraq; **MNSTC-I**—Multi-National Security Transition Cmd.-Iraq; **OCIO**—Office of the Chief Information Officer; **ODCS**—Office of the Deputy Chief of Staff; **OIF**—Operation Iraqi Freedom; **PACOM**—U.S. Pacific Cmd.; **QDR**—Quadrennial Defense Review; **SETAF**—Southern European Task Force; **TPU**—Troop Program Unit; **TSC**—Theater Sustainment Cmd.; **USAACE**—U.S. Army Aviation Center of Excellence; **USARAK**—U.S. Army Alaska; **USARC**—U.S. Army Reserve Cmd.; **USAREUR**—U.S. Army Europe; **USJFCOM**—U.S. Joint Forces Cmd.; **USMTM**—U.S. Military Training Mission; **USSOCOM**—U.S. Special Operations Cmd.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

ceived the Bonfils-Stanton Foundation Award in May for his contributions to science and medicine. The Bonfils-Stanton Foundation recognizes one outstanding Coloradan every year in each of the areas of science and medicine, arts and humanities, and community service.

After completing his residency, Dr. Claman served in the Army, where he established an allergy clinic. "Two years in the Army," says Dr. Claman, "changed me professionally." He is best known for his 1966 discovery that the human immune system has two different types of cells—T-cells and B-cells—that work together to form the antibodies that give immunity from infectious diseases. When the relationship between the two types of cells is not working properly, it leads to immune-related diseases such as allergies and lupus.

BCT Stationing Changes. Secretary of the Army Pete Geren announced in June that the Army will not build three additional brigade combat teams (BCTs) at Fort Bliss, Texas; Fort Carson, Colo.; and Fort Stewart, Ga. This reverses the 2007 decision to expand the Army's brigades and is part of the cost-cutting measures announced by Secretary of Defense Robert M. Gates in April. The decision will have no effect on the Army's authorized end strength of 547,400.

With the activation of the 2nd Brigade, 1st Armored Division, at Fort Bliss in fiscal year (FY) 2010, the Army will reach its target of 45 BCTs; the population of Fort Bliss is projected to grow from 13,742 in 2003 to more than 36,000 in 2013. Fort Carson's population will increase from 15,199 to more than 25,000, and Fort Stewart's will grow from 20,512 to nearly 25,000.

The announcement does not involve the restationing of the two heavy BCTs scheduled to return from Europe in FY 2012 and FY 2013. That issue is being examined as part of the Quadrennial Defense Review now under way. The Army also announced that White Sands Missile Range, N.M., will not, as was originally planned, receive a BCT from Europe in FY 2013. ★

Front & Center

Too Much from Too Few

By GEN Frederick J. Kroesen
U.S. Army retired

Congress and the people have now been informed of the Department of Defense proposal for the Obama administration's first defense budget. The immediate outcry concerning aircraft, ships, missile defenses and the like was predictable, but nevertheless impressive in expressing serious concerns of the services affected. But almost nothing has been said or written about what I consider the most grievous decision: capping the size of the Army at its current end strength and eliminating three brigade combat teams.

The Army is too small; it is stressed (distressed?), strained and wearing out at an ever-increasing pace. It has performed magnificently for the past eight years and is still doing so, but, with an apology for paraphrasing British author and Churchill's physician Lord Moran, who wrote *The Anatomy of Courage*, we are demanding "too much from too few."

The past and current schedules of repetitive service in the combat theaters and other arenas demanding hardship tours (that is, unaccompanied by families) is eroding both the willingness to serve—not only among soldiers but, perhaps more significantly, also their families—and probably the ability to serve. One of the principal lessons learned by Lord Moran in his studies of World War I and World War II soldiers is that courage is willpower and no soldier has an unlimited stock—that courage is capital that is being spent in every combat action at varying rates but by every soldier committed. When his courage is used up, a soldier's effectiveness is gone and his presence becomes a liability. Many psychological studies of soldiers in combat attest to the fact that no one is immune to the ravages of mental deterioration from continuing stress and the fears associated with combat.

Years ago, the Army determined that its wartime structure should provide for three equal parts: one conducting combat operations, one recovering and one preparing to deploy or return to the fight. For the past eight years, the Army has been forced to combine the second and third periods and sometimes commit the first to longer times than it was able to devote to the other two.

That same study determined that forces of the reserve components could be committed for one year in five, but in the past eight years the violation of that policy has played havoc with reserve component soldiers who have lost jobs or been denied jobs because of their service and the liability of another recall for deployment.

A too-small Army also affects the Army School System: The officer, noncommissioned officer and warrant officer corps are being denied the education that guarantees future competence. Restoring adequate faculties, course lengths, student loads and a complete educational program while sustaining the current and foreseen required operational tempo can only be accomplished by increasing the size of the Army; the same holds true for eliminating or reducing the support functions now being provided by civilian contractors. Demanding too much of the too few can only be remedied by increasing the size of the Army. An Army capable of coping with the threat environment of the next 20 years can only be guaranteed by increasing its size.

There are many arguments contending that the Army is large enough, that increasing its size is not possible with volunteers only, that manpower is too costly, and that demands will surely lessen as we withdraw from Iraq and win in Afghanistan. Refuting each contention in detail is beyond the scope of this article, but the following points are germane.

- We sustained an active Army of 785,000 for almost 20 years with volunteers from a lesser population and created the nonpareil forces that won the Cold War and Operations Just Cause and Desert Storm.
- We increased the active Army from 485,000 to beyond the goal of 547,000 in the years since the war on terrorism began, when skeptics insisted it couldn't be done.
- Any study of today's worldwide threats establishes requirements in excess of current capabilities and the mission load. Did we not just learn that we are still at war with North Korea?
- Promises of lessening demand are a thin reed on which to program reductions. I remember clearly the instructions that budgeting for fiscal year (FY) 1968 was to be based on the assumption that the Vietnam War would end in FY 1967. Five years later, war funding was still required.
- Manpower is a commodity that is available in the market and, in the numbers needed for defense, can be obtained from a population of 300 million when a fair price is offered.
- The cost of an adequate defense is much less than the cost of coping with overcoming a crisis for which we were unprepared, one for which we assumed imprudent risk. In a country contemplating spending trillions of dollars for "stimulating" and "bailing out," a few billion for an adequate Army is chump change.
- The current Army family has earned relief from the demands of the current operations tempo. Too much from too few has a downhill glide problem without brakes or a turnaround.

Memorial Day 2009 provided heartwarming nationwide tribute to the servicemembers who paid the ultimate sacrifice in our wars. In ceremonies nationwide, speakers offered recognition, praise and continuing support fo

all who are fighting today and compassion for the wounded and the families living without fathers, mothers or spouses. But I heard or read of no one acknowledging the greatest contribution needed: an Army expansion that will moderate the demands on today's soldiers and the depletion of that well of courage that is being expended over time.

Perhaps the most cogent argument for added end strength can be deduced from the following. It was reported to me by a visitor who returned from Fort Bragg, N.C., that he had asked the wife of a command sergeant major on his fourth combat tour, "How's it goin'?" Her answer was: "I'm tolerating it—he's never home long enough to get a divorce." One can read a lot into that sentiment, but satisfaction is not an apparent feature. □

GEN Frederick J. Kroesen, USA Ret., is a former commander in chief of U.S. Army Europe and a senior fellow of AUSA's Institute of Land Warfare.

A Strategic Necessity

By LTG James M. Dubik
U.S. Army retired

Last month, in "Iraq: Three Operational Movements, but No Symphony," I argued that the current counterinsurgency task in Iraq is to deny irreconcilables the chance to make a comeback. I also argued that preventing their resurgence requires a new mix of force, primarily political and generated by an Iraqi government seen to be increasingly proficient at delivering public goods and services to all elements of Iraqi society, and an economic force generated by Iraqi private-sector jobs. Secondarily, the mix includes security force applied by the Iraqi security forces. The Coalition's main task, therefore, is to assist in creating and sustaining this new mix long enough to "dry up" the conditions that benefit a resurgence by the irreconcilables. Such assistance would be the decisive task that drives home strategic success.

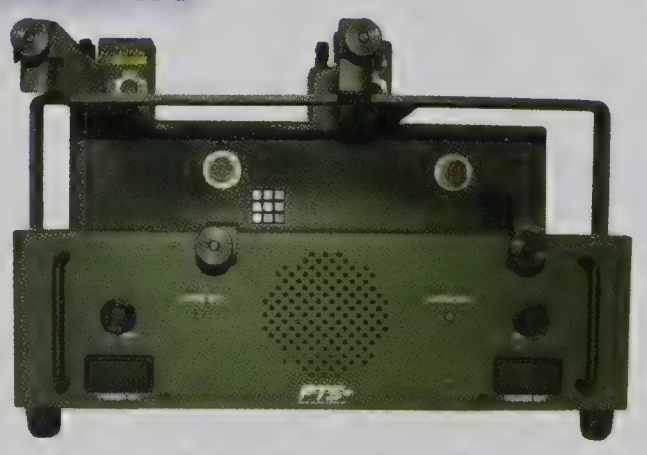
This same strategically decisive task applies not just where we are fighting counterinsurgency campaigns (in Iraq and Afghanistan) but also where we seek to prevent an insurgency from developing. Insurgencies rarely grow where governments capably deliver goods and services relatively equally to all sectors of their citizenry and where local economies provide sufficient jobs that are available relatively equally. In addition, insurgencies rarely grow where internal security forces operate effectively within the rule of law.

The global insurgents we are fighting—al Qaeda and its network of loose affiliates—seek out strategically beneficial conditions. The larger global counterinsurgency task, therefore, is to beat them to the punch: Structure a global counterinsurgency strategy that first identifies these potential "laboratories" for insurgencies, then combines the right mix of security and nonsecurity reform and development programs. In

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strategically key areas, we and our allies should do this before insurgencies take root, which is cheaper and easier than attempting this during a counterinsurgency fight or afterward, and which is in our national and collective strategic interests.

The need for such capacity building is obvious—not just in Iraq and Afghanistan, but also in those places where al Qaeda's ideology is attractive and could take root or, worse, is already taking root. Our ability to meet this need does not lie with any U.S. governmental agency or department, nor with any similar agency in an ally's government, but in a combination of governmental agencies and multiple not-for-profit and for-profit organizations, corporations and agencies in our country and others.

Each of these organizations aims at a small aspect of the larger problem, executing specific agricultural, educational, public works, financial and business projects consistent with its charter. But such individual projects, as important, helpful and necessary as they are, are not linked to developing ministerial capacity in the countries in which they are executed. As such, they are humanitarian but not strategically effective.

Where is the imperative to create strategically effective programs? NATO should be demanding increased effectiveness of the counterinsurgency effort in Afghanistan, as should Central Command. Africa Command, Southern Command and Pacific Command should demand a security and nonsecurity ministerial capacity-building program that links locally important humanitarian projects to a larger scheme that develops a capacity that strategically influences the global counterinsurgency. My bet is that each of these commands has already made such demands and has been disappointed in the result.

We all seem to recognize that a global response is necessary to address the current economic crisis. We also appear to have recognized the need for global coordination with respect to health care. Similarly, there is a growing realization that we are not fighting two wars—one in Iraq and a second in Afghanistan—but a global insurgency that requires a global counterinsurgency strategy. Any international effort must include multiple nongovernmental organizations joined in a coherent scheme in which tactical actions translate into strategic effectiveness that ultimately links to a global counterinsurgency strategy.

Building and fielding this kind of capacity would also go a long way in the counterideological and informational aspects of the global counterinsurgency, undermining propaganda that al Qaeda, its affiliates and others use to attract and motivate followers. Many have come to understand that "you can't kill your way out of an insurgency." Capacity building is perhaps the most important nonkinetic means that, over time, helps end an insurgency.

Such capacity building—assistance that links tactical actions to improved governmental and ministerial performance—is the primary key to strategic success in Iraq. Virtually the same assistance is needed from NATO in Afghanistan, and similar assistance is needed elsewhere as part of a global counterinsurgency strategy. This need is not born of a desire for humanitarian nation-building; it's born from what is necessary strategically to win this war. □

LTG James M. Dubik, *USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.*

CCMRF and Use of Federal Armed Forces In Civil Support Operations

By MG Jeffrey A. Jacobs
U.S. Army Reserve

Last year, the Secretary of Defense assigned the 1st Brigade Combat Team, 3rd Infantry Division, to U.S. Northern Command (NORTHCOM) as part of the first dedicated chemical, biological, radiological and high-yield explosive (CBRNE) consequence management response force (CCMRF). The Internet sprang to life with dire warnings of armed soldiers in full combat gear routinely patrolling our nation's streets. Alarmist predictions ran wild: Steely-eyed infantrymen, just off the plane from Iraq and Afghanistan, not only would be enforcing domestic law but would slide rapidly down the slippery slope to the oppression of American citizens at the behest of an unchecked executive branch of government.

The cyber hue and cry illustrates the depth of the public's misunderstanding and the abundance of misinformation surrounding the federal military role in domestic civil support operations. Misunderstanding and misinformation about defense support of civil authorities (DSCA) in general, of CCMRF in particular, and of the legal authorities governing the domestic use of federal forces exist even within our Army, as illustrated in COL Craig Trebilcock's article "Resurrecting Posse Comitatus in the Post-9/11 World" in the May issue. Clearly, however, Posse Comitatus is quite alive and well, and reports of its impending demise are greatly exaggerated.

Support of Civil Authorities

In a revolutionary doctrinal change, Field Manual 3-0 *Full Spectrum Operations* incorporates civil support as an integral part of the Army's operational concept. Just as soldiers and leaders must understand offensive and defensive operations, an understanding of civil support operations is now imperative. We must eliminate the wrong perceptions of civil support operations, both in the public eye and

within our own institution.

Our armed forces have a long history of supporting civil authorities. In the recent past, the Army conducted postal operations during the 1970 postal strike. In 1981, Army air traffic controllers staffed civilian control towers during the air traffic controllers' walkout. Federal forces supported state and local authorities during Hurricanes Andrew in 1992 and Katrina in 2005, and in many other natural disasters in the last decade. Navy divers assisted local, state and federal authorities during the Minnesota bridge collapse of 2007. Just last year, U.S. Army North (ARNORTH), NORTHCOM's joint force land component command, deployed a two-star task force to command and control federal military forces in support of the Federal Emergency Management Agency (FEMA) and the state of Texas during Hurricane Ike.

NORTHCOM is the combatant command whose area of responsibility includes U.S. soil. Civil support is one of NORTHCOM's two major missions; homeland defense is the other. Although interrelated, the two missions are separate, and, unfortunately, the uninformed tend to confuse them.

Two seminal events, 9/11 and Hurricane Katrina, have heightened the importance of defense support of civil authorities and have underscored the requirement for the Department of Defense to be ready and able to support civil authorities. The establishment of NORTHCOM has greatly improved our ability to respond to domestic emergencies of all kinds, not only as a joint military force but as a nation. Civil support is no longer just an additional duty for the armed forces; it is now a critical continuous endeavor. For example, 10 full-time defense coordinating officers—active Army colonels assigned to ARNORTH—work daily with each of the 10 FEMA regions and coordinate regularly with other federal agencies, state emergency management officials and National Guard leaders.

The Legal/Policy Framework

The role of the federal military in DSCA is carefully defined and deliberately circumscribed by the Constitution, statutes and policy. As many have noted, one of the laws that limits the role of the federal military is the Posse Comitatus Act.

Posse Comitatus prohibits Title 10 forces (that is, the federal military, as distinguished from the National Guard in a state status—Title 10 of the U.S. Code is the title that governs the armed forces) from enforcing state or federal laws, except as otherwise authorized by law. Title 10 forces may not make arrests, stop and frisk suspects, conduct searches and seizures, or perform domestic surveillance. The statutory prohibition on the use of the armed forces to enforce the law, however, does not mean that the military cannot engage with and support civilian law-enforcement agencies.

The Department of Defense has long provided such support. The primary mission of Joint Task Force North (JTF North), a subordinate joint task force of NORTHCOM based at Biggs Army Airfield, Fort Bliss, Texas, is to support civilian law-enforcement



authorities. For years, JTF North has provided that support, with the authorization of Congress, without violating the Posse Comitatus Act or any other law.

As many also have noted, the Insurrection Act is an exception to Posse Comitatus. The Insurrection Act allows the President to use federal armed forces to enforce the law in three instances: at the request of a state legislature or, if the legislature is not in session, a governor; either to enforce federal law or when a rebellion or unlawful "assemblage" precludes enforcement of the law through judicial proceedings; and to suppress "any insurrection, domestic violence, unlawful combination, or conspiracy" if a state fails to protect the constitutional rights of its citizens. Actions taken under the Insurrection Act do not constitute martial law. Martial law is far more sweeping, and the President may impose martial law only in circumstances more extreme than those required to invoke the Insurrection Act.

The Insurrection Act has been invoked rarely in the last 60 years. Presidents Eisenhower and Kennedy invoked the act four times between 1957 and 1963 to enforce desegregation laws in Arkansas, Mississippi and Alabama. President George H.W. Bush invoked the act in 1989, federalizing National Guard units and deploying the 16th Military Police Brigade to restore order in the Virgin Islands in the aftermath of Hurricane Hugo. Finally, the first President Bush, at the request of the governor of California, invoked the Insurrection Act in 1992 to empower a federal joint task force to enforce the law during riots in Los Angeles. In the last instance, the joint task force commander prohibited his soldiers, including federalized National Guard soldiers, from performing law-enforcement missions, even though the President had authorized them to enforce the law.

Discussing DSCA operations, which include CBRNE consequence management, in the same breath as the Insurrection Act only perpetuates misunderstanding. The Insurrection Act does not provide the legal authority for DSCA operations. Federal military (Title 10) forces, including CBRNE consequence management response forces, conduct DSCA operations under the umbrella of the National Response Framework, promulgated by the Department of Homeland Security. The specific statutory authority for DSCA operations is the Robert T. Stafford Disaster Relief and Emergency Assistance Act, commonly known as the Stafford Act.



"Three-man fire teams make sense: two men for suppressive fire, one to record the after-action information."

The National Response Framework outlines the comprehensive, unified system for responding to natural and manmade disasters in U.S. territory. Under this tiered response system, local governments are the first responders to any domestic emergency, and all incidents are handled at the lowest level possible. States become involved in disaster response only if an incident exceeds the capability of local governments to manage the response.

The National Guard, in its capacity as a state force, always has been, and remains, the primary military response to any natural or man-made incident within the United States. Indeed, before federal military forces will be used in response to a disaster in a state, that state, through interstate agreements, will employ the National Guard forces of its sister states. In contrast to the caricature of overeager executive branch officials seeking any excuse to send the federal military into sovereign states, the Secretary of Defense denied California Governor Arnold Schwarzenegger's request for federal forces during recent wildfires because the state's National Guard capabilities had not been exhausted.

The federal government becomes involved only if a disaster overwhelms local and state capabilities, including those of the affected state's own National Guard and of other states' Guard units employed by the affected state and then only at the state's request. When the federal government responds, it designates a lead federal agency. The lead federal agency is most often, but not always, FEMA. DoD's role in all DSCA operations—and CBRNE consequence management is a DSCA operation—is to support the lead federal agency and other federal, state and local organizations.

Under the rubric of the Stafford Act, Title 10 forces perform only discrete and defined tasks, known as "mission assignments." These mission assign

nents result from requests for assis-
ance that are usually passed to DoD
rom the local and state levels through
'EMA. The requests are vetted by the
oint Staff and approved by the Secre-
ary of Defense. Every request is re-
iewed for legality by many DoD
awyers at various levels as it pro-
resses to the Secretary. Aside from the
ecessity to ensure that the use of Title
0 forces in a DSCA operation is legal,
ppropriate and cost-effective, the
rocess ensures that DoD is reim-
ursed for its expenditures under the
tafford Act and that readiness is not
egraded by spending operational
unds for DSCA missions. CCMRF, like
ny other DSCA force, will execute ap-
roved mission assignments, and only
pproved mission assignments.

CCMRF: Facts and Fiction

Citing the Insurrection Act and the
006 amendment to that statute, COL
rebilcock and others have implied
hat the assignment of the 1st Brigade
ombat Team, 3rd Infantry Division,
NORTHCOM as part of CCMRF is
n unwarranted expansion of the
resident's authority to use the fed-
al armed forces on U.S. soil and will
ad to the demise of the Posse Comi-
tus Act. Equating CCMRF with
nchecked executive authority demon-
rates the widespread misunderstand-
g of CCMRF.

In the first instance, DoD has long
ept a combat unit on a short string to
nduct homeland defense missions in
e United States when necessary, and
is unit has fallen under the control of
ORTHCOM since the establishment
that combatant command. Other
an to point out that the Insurrection
ct has empowered the President to act
nilaterally to employ federal forces in
e United States for more than 200
ears, however, any discussion of the
06 amendment to the act is pointless
r, as COL Trebilcock notes, Congress
pealed that amendment in 2008. Our
partite system of checks and balances
orks. If Congress believes that the
esident has too much authority, it
ill act to take that authority away, just
it did in repealing the amendment to
e Insurrection Act.

In any event, CCMRF and the Insurrection Act are "apples and oranges." CCMRF is a DSCA force. Congress understands that, and any intimation that an imperious executive branch is using CCMRF and, perhaps, the Insurrection Act as an attempt to evade the law, sidestep Posse Comitatus, and undercut Congress and state and local authority does not pass muster. Congress fully supports DoD's efforts in creating CCMRF and assigning the first CCMRF to NORTHCOM. As the Senate report to the 2009 Defense Authorization Bill states, "Efforts to establish forces to manage the consequences of CBRNE incidents should receive the highest level of attention within the [Defense] Department, and the additional forces needed for CBRNE consequence management should be identified, trained, equipped, and assigned to U.S. Northern Command as soon as possible."

More important, though, the slippery slope argument evinces the lack of understanding of the CCMRF mission and of why that mission is so vitally important to our national security. The CCMRF mission is to provide rapid response capability to assist local, state and other federal authorities following a catastrophic event. CBRNE incidents pose a great and very real security challenge in the United States. A terrorist attack or accidental CBRNE incident could be catastrophic and likely would overwhelm local and state authorities very quickly. Federal military forces have capabilities that, in a catastrophic CBRNE event, may be otherwise unavailable to states and localities.

A CCMRF is a joint force usually organized under a two-star headquarters. It is composed of three subordinate colonel-level task forces: operations, medical and aviation. Task Force Operations is formed around the nucleus of a brigade combat team or maneuver enhancement brigade, augmented by logistics and specialized CBRNE units. Task Force Operations is capable of CBRNE detection and decontamination and can provide, among other things, transportation, logistics, communications and public affairs sup-



port to local, state and federal entities.

Task Force Medical provides public health support, augments civilian medical facilities, conducts casualty collection operations, assists with patient movement and provides medical logistics support. Task Force Aviation provides heavy- and medium-lift helicopters, including medevac aircraft.

Currently, only one CCMRF is operational. The second CCMRF will become operational in October and the third in October 2010. Army National Guard brigade combat teams, to be employed in a Title 10 status, will form the nucleus of Task Force Operations of the second and third CCMRFs.

CCMRF and Posse Comitatus

Ours is a nation of laws. The Department of Defense is bound by the law, and the armed forces scrupulously obey and uphold the law. That law includes the Posse Comitatus Act.

As in any DSCA operation, the objective of CCMRF is to save lives, relieve suffering and mitigate damage. CCMRF is not a police force. It is not organized, manned, trained or equipped to perform law-enforcement missions. In fact, CCMRF soldiers, sailors, airmen and marines, like all Title 10 forces performing DSCA operations, are prohibited by DoD policy even from carrying weapons without the express approval of the Secretary of Defense. The specter of armed federal soldiers patrolling American cities in full battle gear is farfetched. Indeed, under the National Response Framework, the primary federal agency for coordinating matters of public safety and security is the Federal Bureau of Investigation, not DoD.

COL Trebilcock's suggestion that active Army soldiers, if domestic unrest and violence are so serious that weapons must be carried during DSCA operations, cannot adapt from combat to civil-support operations in the United States without violating rules for the use of force is unconvincing. Aside from the fact that our Army is the most disciplined, best-trained, best-led military force in the world, the near-instantaneous transition from combat operations to DSCA operations has occurred without incident: The 256th Infantry Brigade, Louisiana Army National Guard, redeployed early from Iraq in 2005 to assist in Louisiana's response to Hurricane Katrina—including providing support to law-enforcement authorities.

CCMRF is essential to our nation's integrated domestic response capability. CCMRF does not supplant state, local or other federal authority; it supplements it by providing response, rescue, relief and recovery capabilities that states, localities and other federal agencies may lack in a CBRNE event.

Those who believe that CCMRF somehow subverts the law and portends the demise of Posse Comitatus have misunderstood the role the federal armed forces have long played in DSCA operations. In the post-9/11 world, that role is ever more important. Given the fundamental obligation of assuring our nation's capability to respond to the unthinkable—and the potential consequences of failing to do so—it behooves all of us to work to correct that misunderstanding. □

MG Jeffrey A. Jacobs, U.S. Army Reserve, is the commander of Operational Command Post 2, U.S. Army North, Fort Sam Houston, Texas. He is the author of The Future of the Citizen-Soldier Force: Issues and Answers *and numerous articles.*

Contractors on the Battlefield And Our Professional Military Ethic

By COL David Gray and LTC Joseph Doty

The Vice Admiral James B. Stockdale Center for Ethical Leadership at the U.S Naval Academy recently held its annual McCain Conference. The conference's theme was a timely but often neglected topic in our think tanks and service-academy and service-school curriculums: "Ethics and Military Contractors: Examining the Public-Private Partnership." Three of the featured speakers were MG Eric Olson, U.S. Army retired, former commanding general of the 25th Infantry Division (Light); Erik Prince, former CEO of Blackwater; and James Jay Carafano, a senior research fellow with the Heritage Foundation. Each of these speakers highlighted the benefits as well as pitfalls of relying on civilian contractors to perform tasks previously carried out by military forces.

Three major themes resonated throughout the conference: cost savings, accountability and oversight. The tie that bound these three themes together was the hotly debated issue of how uniformed services' enhanced use of contractors affects their professional military ethic.

Although their presence in war zones may seem like a new or recent phenomenon, contractors have supported military forces throughout history. Since its inception in 1775, the U.S. Army has contracted vital logistical services and arms, a trend that has accelerated in modern times because of global security commitments, force structure and the complexity of modern technologies. Over the past eight years of fighting in the Central Command area of responsibility, contract employees have played a vital role in supporting our national interests. Many aspects of a sustained campaign simply cannot be accomplished without them.

When discussing or debating the notion of contractors on the battlefield, it is important to get a shared mental model of what we are *really* talking about. Contractor support comes in many forms, both in and out of the battle zone. Especially within the context of overseas contingency operations, there seems to be little debate that some support functions—food services, logistics, maintenance

upport and training—can and should
e contracted out. The use of contract
nguists, very often native speakers,
lso logically seems necessary because
f the time it takes to develop such a
igh level of fluency. The private se-
urity contractors who especially
ome into question—those who must
arry weapons to fulfill the require-
ents of their contract—make up
nly a small percentage of contractors
n Afghanistan and Iraq. As COL Pat
ullivan, a former logistics brigade
ommander in Iraq, posits: "What ef-
ct will these contractors have on our
ilitary occupational specialty exper-
se and our Army's bedrock values?"

The all-volunteer force competes
ith private contractors for high-qual-
y recruits. The military's ability to re-
in its trained and experienced soldiers
clearly influenced by them working
de by side with contractors—usually
r far less money. Both the soldier and
e contractor provide vital services in
e defense of the nation, with contrac-
rs fulfilling the supporting role to the
ilitary mission. By their very nature,
owever, the two differ in their outlook
nd ethical approach to their mission.
ne military's professional culture is
rmly grounded in selfless service to
e nation. Although individual con-
actors and many companies' cultures
press patriotism, a contracting firm's
ork ethic is primarily rooted in profit.
hen military servicemembers and
ntractors serve together in the far
aches of the world, these differing
ltures often clash, resulting in "cul-
ral" tensions that can challenge the
ofessional military ethic.

Three key friction points inevitably
rface when getting to the heart of
e effect of contractors on the profes-
nal military ethos:

- Motivation of personnel, as ex-
essed by an oath versus a contract.
- Definition of the military's versus
ntractors' core competencies.
- The need for unity of effort/com-
and, especially during contingency
erations.

The significance and difference be-
een the military's oath and a civil-
n's contract is the first salient point in
s discussion. The uniformed military take an oath to "support and defend the Constitution ... against all enemies, foreign and domestic." This oath is both a legal and moral requirement. The oath encompasses a set of ideals and principles that are grounded in the Constitution, American law and military culture. Implicit in the oath is the notion of certain sacrifice, including the loss of life or limb, to protect those ideals on behalf of the American people.

On the other hand, a contract is a legal document that mandates an employee to accomplish certain tasks. While loss of life or limb might be a possible result from fulfillment of a contract's terms, these risks occur coincidental to operating in a hostile environment. Military members *can* be involuntarily compelled to face these types of dangers in a 24/7 context, while most contractors *cannot* and *will not* involuntarily work in a 24/7 context unless so stipulated in their contract. In layman's terms, an oath requires military professionals to perform their *duty* (which encompasses anything that is legal), whereas a contract specifies only certain tasks under certain conditions. The difference between an oath and a contract is the difference between the words *duty* and *task*.

Let's be real—contractors work to make money; soldiers, while they clearly will not work for free, are not in it for the money. Career officers and noncommissioned officers could make much more money in the civilian sector than they do in the military, most often at no risk to life and limb. *PARADE* magazine's annual edition citing how much people earn shows the enormous disparity between a CEO in the civilian world and a "CEO" in the military. Life in the military is a vocation—a calling—while contractors have occupations.

The next salient friction point centers on the definition of the differences in core competencies between the military services and contractors. Our government and the American people trust and expect that the U.S. military, as a profession, will possess, develop and refine its expert knowledge of warfighting across the spectrum of conflict. No other profession or organization has this sacred national security requirement. Just as doctors and lawyers have a mandate to use their expert knowledge for societal good, so, too, does the military. Moreover, this expertise has both theoretical and practical dimensions acquired by members over a lifetime of learning and practice. Although many contractors are former military members who graduated from military schooling, their expertise is limited to the skills necessary to perform the contractual tasks at hand and becomes outdated over time.

Thus this mandate ultimately begs several questions: What are the military services' nonnegotiable core competencies that only they can perform? Should a portion of this expert knowledge be contracted out and if so,



"Enjoy the ride. He's mine resistant ambush protected."

where, when and how much? Are the U.S. government and American public prepared to privatize their defense? One participant briefly broached this topic at the McCain Conference, stating that "Americans sleep soundly at night knowing that the U.S. military is keeping watch around the world."

The third salient friction point surfacing in this discussion is the unity of effort/command that all military operations require as one of the timeless principles of war. Inserting contractors into an already complex counterinsurgency environment further increases the complexity. To date, the military has not always done a good job of integrating contractors into the planning or execution of military operations. Often contractors do not understand the larger context of the operation or understand how their actions can adversely affect the military mission. In applying force to protect their "principal" in dangerous circumstances as allowed by their contract, some private security contractors have inflicted civilian casualties and caused property damage. Such incidents as those that occurred in Kirkuk in 2006 and Baghdad in 2007, for example, present further second- and third-order effects for area commanders who have to pick up the pieces afterwards. Because local inhabitants do not distinguish between military and private security contractors in such cases, these incidents greatly sour relations with local community officials and breach the communities' trust in Coalition operations.

In a final assessment, the U.S. military is a values-based profession—a civilian company *may or may not* be a values-based company. Values, ethics, duty, honor, integrity, selfless service and respect are constructs that are not easily measured or counted, but they do exist, and they make up the essence of our professional military ethic. While many contractors are former servicemembers who have internalized military values, many are not, especially those hired from local host-nation sources. Moreover, contractors have to respond to the pressures of their corporate organizations whose profit-driven culture differs from the military's value of selfless service. For some experienced military members, becoming a private security contractor for more pay and less formal organizational discipline while still experiencing the continuing excitement of dangerous situations is extremely attractive. These differing cultural values can potentially corrode the duty concept ingrained into military members as they serve alongside contractors who sometimes make more money with less daily hazard.

Both the military and contractors engaged in the stability operations industry have made strides to bridge the gaps between themselves. In Iraq and Afghanistan, military commands and contractors have formed coordination and liaison cells to share information. Member companies of the International Peace Operations Association that provide support to stability operations have promulgated a code of conduct to guide ethical practices. Moreover, the Department of Defense has recently clarified the legal status of contractors on the battlefield to ensure better accountability and to be able to prosecute criminal actions. Nevertheless, challenges will continue as the number of contractors and the services they provide increase. Thus the policymakers need to ask themselves one question: Does the value of the professional military ethic trump the cost savings? □



"I always wanted to be a fireman."

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(The views expressed herein are those of the authors and do not purport to reflect the position of the U.S. Military Academy, the Department of the Army or the Department of Defense.)

AMEDD: Keeping the Army Fit to Fight

By LTG Eric B. Schoomaker



The dedicated men and women—military, civilian, volunteer and contractor—of the U.S. Army Medical Department (AMEDD) personify the Army value of "selfless service." Their service ensures that critical missions to protect our combatants, to deploy in support of that force, to care for wounded, ill and injured soldiers, and to protect and care for the Army family are simultaneously achieved.

We are successful in these missions through a $10 billion international health promotion and health-care delivery command staffed by more than 70,000 professionals. I know firsthand that the men and women of AMEDD are experts in medical research and development, medical logistics, training and doctrine, health promotion and preventive medicine, dental care, and veterinary care in addition to delivering an industry-leading health-care benefit to 3.5 million beneficiaries around the world. These disparate missions are synchronized, resourced, measured and tracked through the Army Medicine Balanced Scorecard—a tool that has seen widespread use and great advances in 2008–09.



SFC Greg Deleon demonstrates the proper use of a combat action tourniquet during a combat medic class at the U.S. Army Medical Department Center and School, Fort Sam Houston, Texas.

DoD/Fred W. Baker III

Central to everything we do is the warrior—we exist as AMEDD to support the warrior. I am happy to report that we are accomplishing our missions phenomenally well. Army Medicine and the joint medical force provide top-notch medical support from the garrison to the battlefield and back, across the full continuum of care.

This is an extraordinary year for Army Medicine. One hundred years ago, the first patients were admitted to a new Army medical hospital in Washington, D.C., named for a remarkable man whose scholarship, courage and reasoned approach to the communicable disease threats of his day helped change the course of history in the United States and the Western Hemisphere. That Army physician-scientist was MAJ Walter Reed, who led a team to study yellow fever in Cuba. He proved that mosquitoes transmitted yellow fever and thus contributed to the control of that disease as well as malaria, ultimately enabling the building of the Panama Canal. MAJ Reed was unaware that his discoveries would have such a transformative effect on America's future; he was driven by a thirst for knowledge and a commitment to improve the lives of his fellow human beings. His personal writings are filled with excitement and exultation when he realized he might have discovered a way to curb one of the deadliest diseases of his time (and for the 400 preceding years in the Americas). He applied knowledge, courage and clarity of thinking where passion and an almost religious belief in the cause and transmission of disease prevailed. His reasoned, dispassionate approach is being applied to the combat challenges of 2009: mild traumatic brain injury or concussion, post-traumatic stress disorder (PTSD), trauma management and infectious threats.

The Army has designated 2009 as the Year of the Noncommissioned Officer. Noncommissioned officers (NCOs) are essential to military medicine and to saving lives on the battlefield. NCOs make up 18 percent of AMEDD and play critical roles in every aspect of our support for the Army family.

As vital as our role is in treating and healing wounded or ill soldiers, protecting soldiers from injury and sickness is equally important. Led by dedicated NCOs like SGT Kerri Washington, who deployed from the Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Md., to Baghdad with the 61st Medical Detachment, preventive medicine specialists keep our Army fit to fight.

Our medics are bringing new tools to the battlefield helped by combat developers like MSG Christian Reid and SFC Raymond Arnold, whose work has improved the mine resistant ambush protected ambulance, Army combat helmet, combat arms ear plugs, improved outer tactical vest and fire-retardant uniforms.

The survival rate of servicemembers injured in combat is greater than 90 percent. This has been accomplished despite increasingly destructive weapons wielded by an adaptive enemy and wounds unparalleled in civilian trauma medicine. We believe armored vehicles, body armor, better training of all warriors in self- and buddy-aid, better trained

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LTG Eric B. Schoomaker is Army Surgeon General and commander, U.S. Army Medical Command.

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U.S. Air Force/TSgt Jeremy T. Lock

SGT Catherine Olivarez, a medic with the 345th Civil Affairs Brigade, looks over a toddler during a medical civil-action program at a village school in Goubetto, Djibouti.

medics, faster helicopter rescues, and rapid evacuations out of theater all contribute to lowering our killed-in-action and died-of-wounds rates.

Our great health-care professionals need modern facilities and state-of-the-art equipment to continue to improve care. We have received funding for new hospitals at Fort Hood, Texas; Fort Benning, Ga.; and Fort Riley, Kan. New facilities are also being built in San Antonio, Texas, as the Army and Air Force hospitals there join to form the San Antonio Military Medical Center, and in the national capital area, where military health services will be consolidated in the new Walter Reed National Military Medical Center in Bethesda, Md., and a new hospital will be built at Fort Belvoir, Va. The quality of our facilities is tangible evidence of our commitment to our military families and our medical staffs.

I also want to mention one of our research initiatives launched last year—the Armed Forces Institute of Regenerative Medicine. This multi-institutional, interdisciplinary network is using bioengineering techniques to prompt the body to regenerate cells and tissue. The institute holds great promise: Ultimately, we may be able to regrow whole organs and engineer replacement fingers and limbs.

We are also developing the National Interagency Biodefense Campus at Fort Detrick, Md., to fill gaps in national protection against biological weapons and epidemics and integrate agencies for a whole-of-government approach to national security. Research includes work on developing vaccines, diagnostics, forensics and therapeutics.

One outstanding example of our talented researchers is Dr. Lisa Hensley. As a microbiologist at the Army Medical Research Institute of Infectious Diseases, she headed efforts to understand how deadly diseases threaten infected hosts, leading to candidate therapeutics for Severe Acute Respiratory Syndrome and Ebola. Last year, Dr. Hensley



CPT Jabari White, severely burned during an explosion in Iraq, leans on a therapy table at Brooke Army Medical Center, Fort Sam Houston, while burn therapist Alicia White of the Institute of Surgical Research works on helping him flex his arm.

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U.S Army/PFC Eric J. Martinez

Above, PFC Leanna M. Goodrum, a mental health counselor for the 62nd Medical Brigade, conducts a counseling session in Iraq. Below, SPC Nicholas Williams, wounded in Iraq in July 2007, works out his prosthetic leg at Walter Reed Army Medical Center.



Heike Hasenauer

was named one of the Ten Outstanding Young Persons of the World by the Junior Chamber International worldwide federation of young leaders and entrepreneurs.

As the Secretary of Defense has stated, aside from winning the war we have no higher priority than the care of our wounded. To that end we have had several successes.

■ This year I, along with all my hospital commanders, signed the Army Warrior Health-Care Covenant in which we express our gratitude for what our warriors have given and promise them the highest quality of care possible as well as the assistance needed during their healing. That covenant is more than a piece of paper; indeed, it is a solemn commitment by which we live.

■ This year, the U.S. Army Medical Command (MEDCOM) stood up the provisional Warrior Transition Command (WTC), a new one-star command within MEDCOM that serves as the organizational focal point for the Army's Warrior Care and Transition Program. The WTC is responsible for execution and oversight of the Warrior Care and Army Wounded Warrior programs for the MEDCOM commander.

■ In our first year of Warrior Care and Transition, we heavily invested in the structure of our units and support systems. Now in our second year, we recognize that our focus needs to be on optimizing the transition for our soldiers. In March 2008, MEDCOM launched the Comprehensive Transition Plan initiative for warriors in transition. Instead of focusing solely on injury or illness, the Comprehensive Transition Plan fosters a holistic approach to a warrior's rehabilitation and transition. This is accomplished through the collaboration of a multidisciplinary team of physicians, case managers, specialty care providers and occupational therapists. Together with the soldier, they develop individually tailored goals that emphasize the transition phase to civilian life or return to duty.

■ MEDCOM employs ombudsmen who operate independently, answering to MEDCOM and the Army for service to wounded warriors and their families, cutting through red tape. These ombudsmen, most of them former medical noncommissioned officers, know the system. For example, an ombudsman contacted a soldier's commander and told him the soldier's medication needed to be stabilized before he could deploy. The ombudsman's negotiations resulted in the soldier being allowed to remain with the rear detachment and receive the medical care he needed prior to deploying.

■ The Medical Evaluation Board and Physical Evaluation Board process

COMBAT TAKES TWO HANDS.

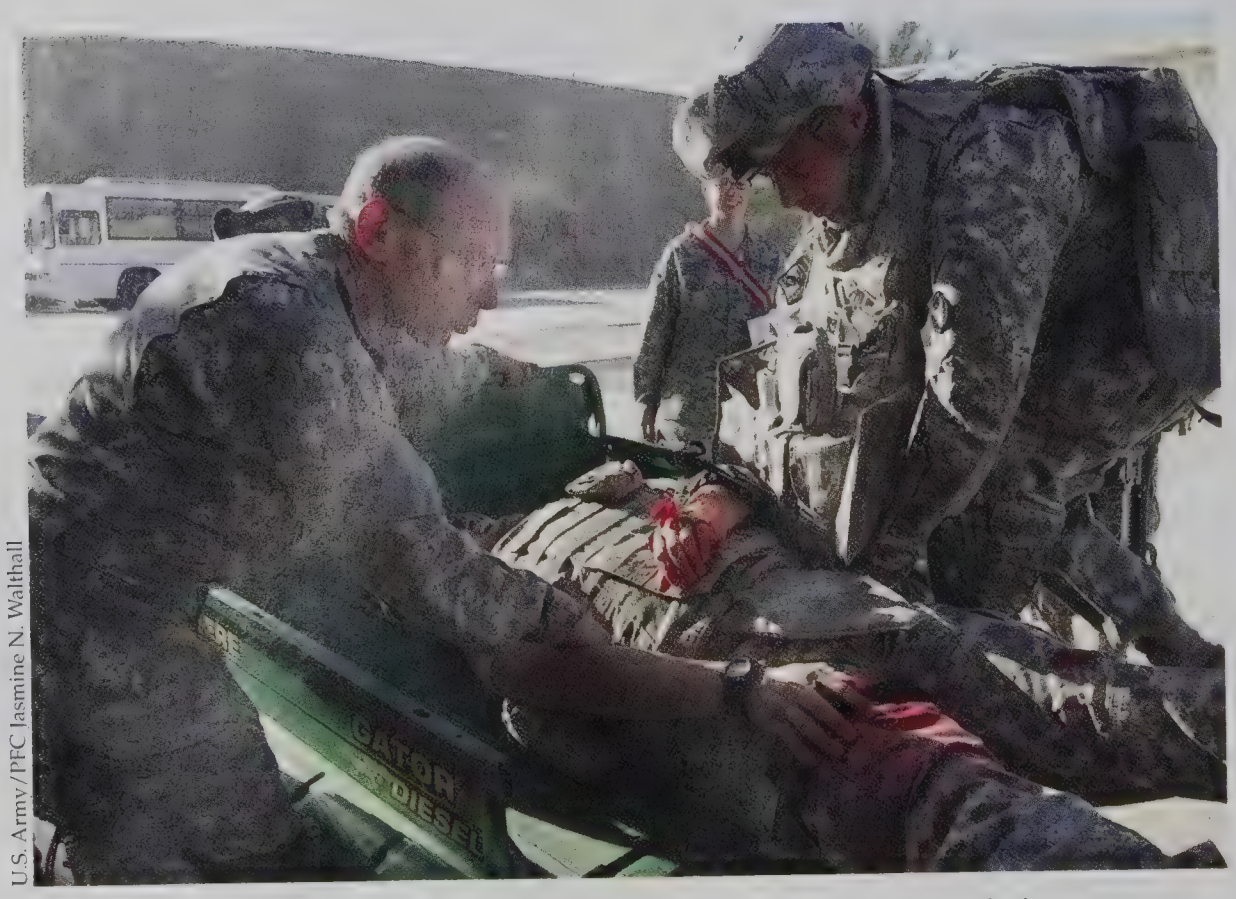
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U.S. Army/PFC Jasmine N. Walthall

COL Lionel M. Nelson, USA Ret. (left), assists soldiers during a mass-casualty training exercise in Baghdad, Iraq. Nelson, retired since 2004, was on a 90-day boots-on-the-ground volunteer assignment as brigade surgeon for the 449th Theater Aviation Brigade.

are being reformed and streamlined so that the disability of a warrior in transition can be evaluated more efficiently and promptly. Warriors should be able to concentrate on regaining their health without worrying about paperwork and bureaucracy.

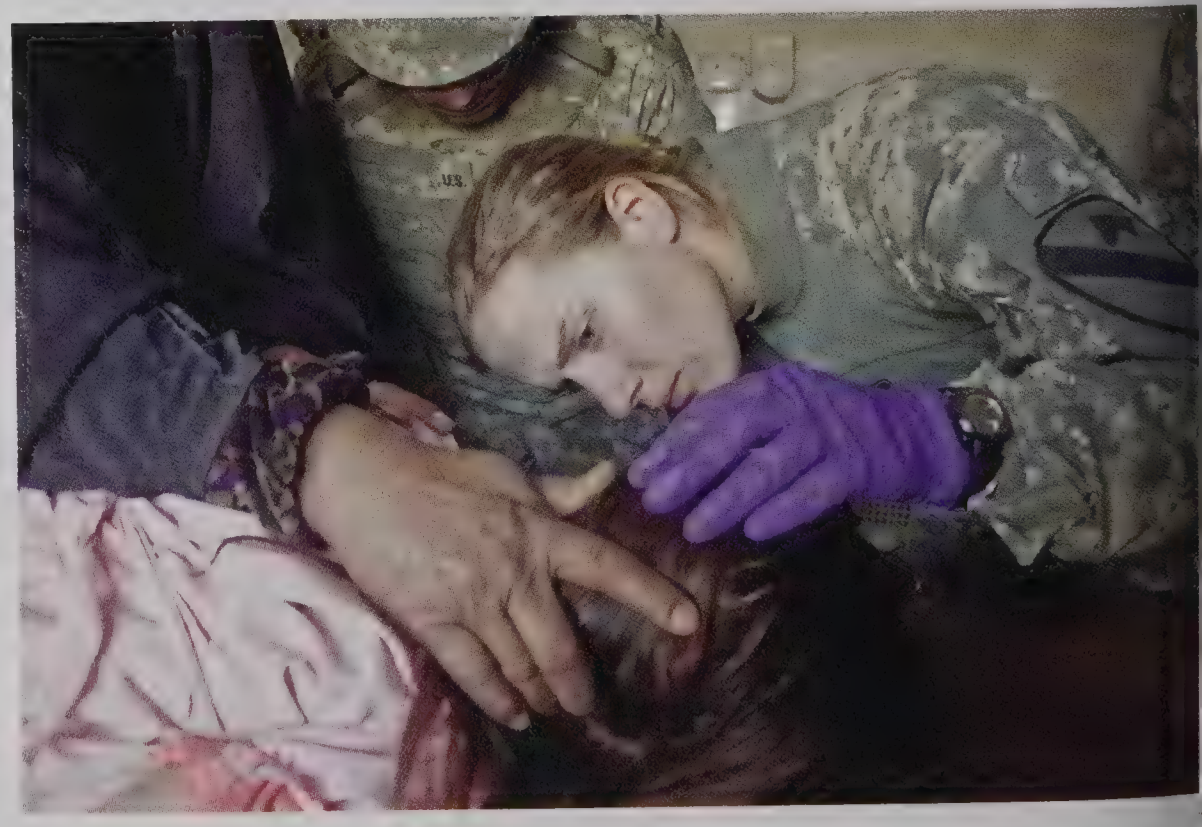
Army leaders at all levels recognize that combat and repeated deployments are difficult for soldiers and put stress on our families. We are making bold, sustained efforts to improve the resilience of the entire Army family, to reduce the stigma associated with seeking mental health care, and to provide multidisciplinary care addressing specific behavioral health needs promptly and expertly. For example, across the Army over the last two years we increased the number of behavioral health-care providers by almost 40 percent; we are completing the sixth iteration of the in-theater Mental Health Advisory Team; we held an Armywide stand-down to train soldiers on suicide prevention; and we launched the Army Campaign Plan for Health Promotion, Risk Reduction and Suicide Prevention.

We are resolved to prevent adverse social outcomes associated with military service and combat, such as driving while intoxicated and family violence. Suicides are unacceptable losses of our soldiers. Realizing that the loss of one soldier to suicide is one too many, we are looking closely at factors involved. Rather than primarily PTSD as one might expect, we continue to see fractured relationships and work-related stress as the major factors in soldier suicides.

The Army Chief of Staff has established a vision of an Army composed of balanced, healthy and self-confident soldiers and families whose resilience and total fitness enable them to thrive in an era of high operational tempo and persistent conflict. To achieve this ambitious vision, he is instituting the Comprehensive Soldier Fitness program, the intent of which is to increase the resiliency of soldiers and families by developing the five dimensions of strength: physical, emotional, social, spiritual and familial. Under the leadership of BG Rhonda Cornum and through the commitment of NCOs like MSG Richard Gonzales, I expect this program to have a profound effect on soldiers and their families.

Belonging to the Army medical family means having the opportunity to serve America and the global community. We are motivated by the desire to do the very best we can for each wounded person we treat and to work tirelessly to improve our ability to save as many as possible. The nation expects us to save lives on the battlefield using the finest techniques, best research and highest professional values—I am proud to affirm that the men and women of Army Medicine live up to this expectation every day.

Army Medicine: Army Strong, NCO Strong. ★



PFC Rachelle Halaska, a combat medic with the 1st Squadron, 9th Cavalry Regiment, inspects a child's ear during a medical-assistance mission at a clinic near Forward Operating Base Hunter in Iraq.

The U.S. Army Institute Of Surgical Research

By Scott R. Gourley

The U.S. Army Institute of Surgical Research (USAISR), originally named the Surgical Research Unit, was established in 1943 at Halloran General Hospital, Staten Island, N.Y., to "evaluate the role of newly discovered antibiotics in the treatment of war wounds." The Institute moved to Fort Sam Houston, Texas, in 1947, where its mission was expanded to include the study of potential thermal injuries caused by nuclear weapons. Unit responsibilities continued to grow over the next several decades, and as part of the Army Medical Department reorganization in March 1994, the Institute became a subordinate command of the Medical Research and Materiel Command. In 1996, the Institute moved to its current location adjacent to Brooke Army Medical Center, Texas, with its mission focus expanded to full spectrum combat-casualty care. Today USAISR has a staff of approximately 550 military, Depart-



In 1996, the U.S. Army Institute of Surgical Research (USAISR) moved to its present location adjacent to Brooke Army Medical Center at Fort Sam Houston, Texas.



PFC Rob Lienhart, 57th Signal Company, 172nd Infantry Brigade, applies a tourniquet during a combat lifesaver course at Forward Operating Base Kalsu, Iraq. New generations of tourniquets now in use have helped raise combat survival rates.

ment of the Army civilian and contractor personnel dedicated to the Institute's vision as DoD's premier combat-casualty care, research, trauma, burn and critical-care center in support of the medical needs of warfighters and other beneficiaries.

David G. Baer, Ph.D., director of research for USAISR, recently offered several examples of successful equipment fielding efforts from the Institute that have "really made a difference to soldiers in the field."

"Probably our best success story from this conflict is tourniquets," he said. "I think it highlights how we work, how we address problems and how the Army, working at its best, gets things to the battlefield quickly to really make a difference."

Explaining that "hemorrhage is the leading 'potentially preventable' cause of death on the battlefield," Baer said, "Some of that bleeding occurs to the extremities and could be addressed with a tourniquet."

Baer acknowledged that one of the first battles in the fielding of a new tourniquet involved dispelling faulty lore about tourniquets and loss of limbs.

"We looked at the data that was available in the scientific literature and that was available from the reports coming back from the field, and there is excellent scientific evidence to show that a tourniquet placed on a limb for less than 2 to 4 hours is safe," he said, "and they do not produce long-lasting injury as long as they're not left on for a long time."

USAISR's materiel process in 2004 included a worldwide survey that identified 11 tourniquets being sold or in development. Testing of those designs on human volunteers resulted in one being dropped as too heavy and seven more being dropped because they didn't work. Of the remaining three designs that did work, two were subsequently recommended for the field: the combat-application-tourniquet (C-A-T) and the special operations forces tactical tourniquet (SOFTT).

"Both of those are still being sold today," he said. "The C-A-T tourniquet is the one being recommended, but the SOFTT is also acceptable."

USAISR also worked across the Army team in the development of training, doctrine and repackaging of the individual first aid kit—redesignated as the improved first aid kit (IFAK)—with the new tourniquet and several other life-saving items, ranging from a new airway tube to a needle used to decompress a pneumothorax.

"A chest injury with air escaping into the chest cavity can kill you," Baer explained. "The solution is to take the needle and poke it in there to let the air out. Now, that's going to hurt physically, but even if you think there may be a pneumothorax and you do it when the patient didn't need it, the patient is going to be fine. So those were the sort of technologies that went into the IFAK, based on what was killing soldiers on the battlefield."

"Part of it was getting more capability to the individual soldier because sometimes you can't wait for a medic," he added. "There's one medic per platoon, so the real way to help prevent death on the battlefield is to have real capability in the hands of all soldiers for use on their buddies."

Returning to the tourniquet example, Baer summarized the result of further coordination with training and doctrine developers: "The recommendation to prevent hemorrhage death became 'When under fire, use a tourniquet.' Tourniquets are safer for the person applying them than a dressing because you can put them on under cover, instead of working with bandages and dressings, which can expose you to enemy fire. When you don't have tactical control, the tourniquet is the first-line hemostatic agent. When you get tactical control, the doctrine is to take the tourniquet off and change over to a dressing. If you can't control it with the dressing you put the tourniquet back on and evacuate."

"Tourniquets are safe," Baer added. "That's partly because we have an excellent evacuation system and medical

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***Scott R. Gourley**, a freelance writer, is a contributing editor to ARMY Magazine.*

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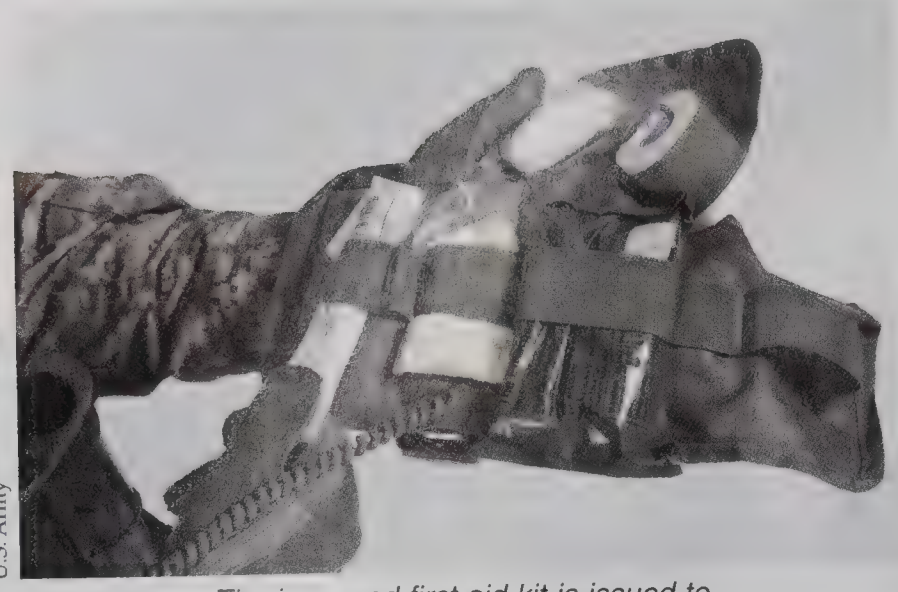
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U.S. Army

The improved first aid kit is issued to every soldier who deploys to theater.

care system. So when you put a tourniquet on, you are not going to leave it on for more than 2 to 4 hours because you're going to get that soldier to a hospital where a surgeon can address the hemorrhage."

Another recent USAISR fielding success involves hemostatic dressings that are treated with materials to help stop bleeding.

"There are things that you can't put a tourniquet on, but that you can put a dressing on," Baer said. "And we have now fielded two rounds of dressings that are improvements over the old Army gauze dressings, which were a [very old] technology. That doesn't mean it's not good—the reason that it's still used is that it's a good hemostatic device. But the chitosan dressing that replaced it was one incremental improvement. And we have just replaced that with 'combat gauze.' So the chitosan is now being turned over and replaced with something new."

The new Combat Gauze is composed of a 3-inch-by-4-yard strip of sterile gauze coated with kaolin, an inorganic clay material and potent procoagulant that helps stop bleeding through activation of the natural blood-clotting cascade.

"That is starting into the field now," Baer said. "We wanted to make sure that soldiers had the best hemostatic agent available."

USAISR was also involved in the development and fielding of a new vehicle first-aid kit.

"At the start of the war, they had the first-aid kit that you might have in your car, with some Band-Aids and tape and things," he said. "What the vehicles needed was an expanded version of the IFAK: They needed tourniquets; they needed dressings; they needed a stretcher. All those things were assembled together and used to replace the little first-aid kit to provide the kinds of things that will save lives if the vehicle crew is hurt."

"I want to emphasize that it's not just the USAISR, but the entire Army medical system coming together with data-driven solutions to battlefield problems," he added.

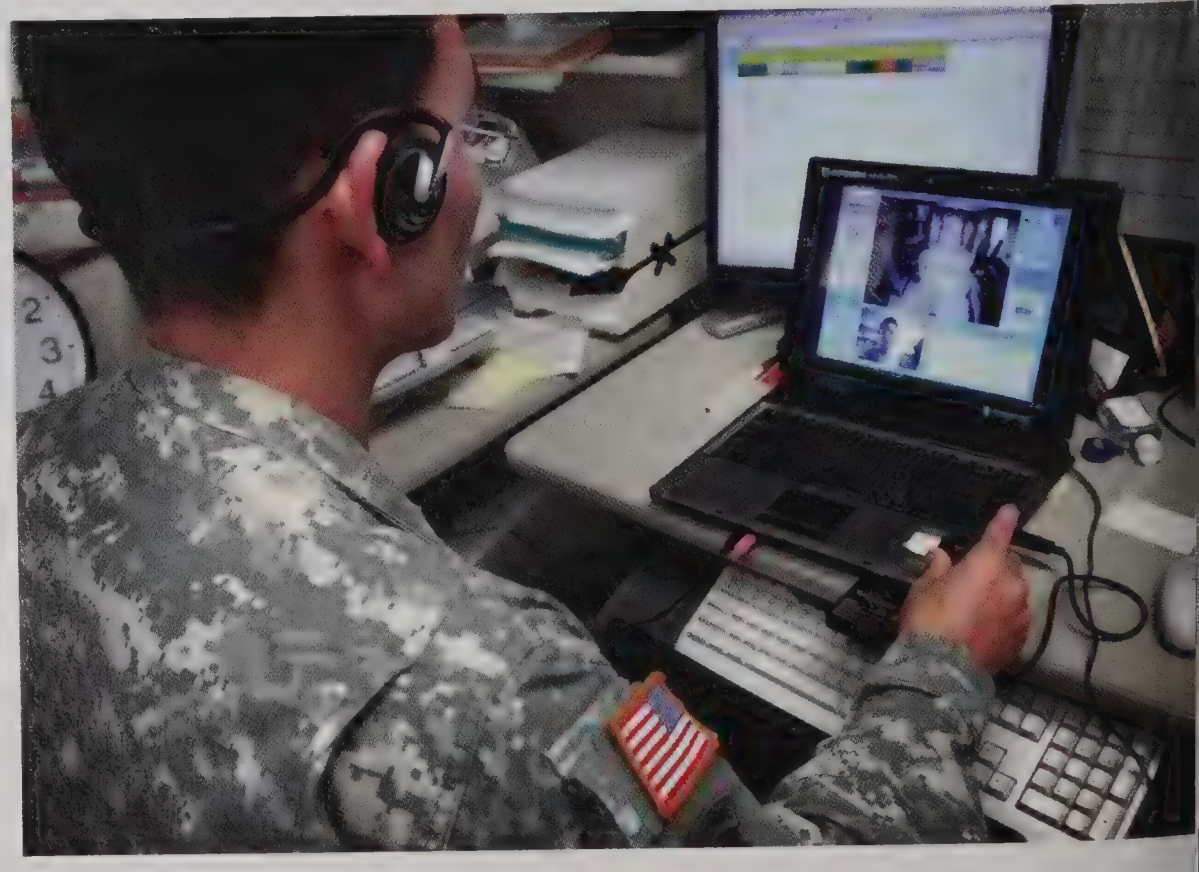
Along with those representative immediate-care enhancements that one soldier provides to another, Baer pointed to other USAISR efforts to enhance available care that have been directed toward medics, evacuation and field hospitals, and enhancement efforts for the treatment of patients who arrive back in the continental United States.

"USAISR is the home of the Army Burn Center, where we have supported the continuous renal replacement therapy for seriously burned soldiers," Baer said. "If you get a burn that's extreme—life threatening—one of the things that can happen is that your kidneys shut down. So the doctors up in the burn ward applied a device that takes over the function of the kidneys and gets patients through that critical time to let them recover. And it has reduced deaths from those severe injuries."

"That's now being incorporated into civilian burn centers to help civilian trauma patients as well," Baer said.

USAISR's burn-treatment activities have also been accompanied by other activities focused on burn prevention. For example, after learning that hand burns were common, efforts went into modifying the Nomex gloves used by aviators to make them more durable and appropriate for dismounted operations.

"Similarly, we developed what we call the burn shirt," Baer noted. "It's a shirt designed to protect the torso from burns. We were seeing that the body armor was protecting the front and back of the torso from burns, but we were seeing burns on the sides and on the arms. So we worked with



Dr. Kevin Chung, medical director for the burn intensive care unit at Brooke Army Medical Center, remotely controls an RP-7 robot he has been using to care for patients as part of a pilot program.



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The TRI-SERVICE Battlefield Health and Trauma Research Center of Excellence rising across from USAISR will centralize professionals from three services.

PEO [program executive office] Soldier to develop a fire-resistant shirt to go under body armor. Called the Army combat shirt, its fire-resistance is in those places not protected by body armor. Those parts already protected are designed to cool through moisture-wicking and the passage of airflow. It really reflects a collaboration between the uniform developers and the burn surgeons to address a problem they saw coming off the battlefield."

"Another big change we've made," Baer continued, "is in recognition of the fact that injuries on the battlefield are almost all penetrating trauma. Blood loss is often a problem with that. The 'old way' of treating blood loss was to start with saltwater. If that didn't work, you went to packed red cells for the oxygen-carrying capacity. Then, if that didn't work, you added in platelets and plasma, the clotting parts of blood. Well, somebody said, 'It's kind of crazy to do that when we know we have a seriously injured patient who has bled a lot. Let's give back the things that will help them carry oxygen and clot blood.' So we have adopted early intensive use of blood products for fluid resuscitation of casualties. That was invented in this ward, and it has had a significant impact on mortality."

With these lifesaving processes now being adopted, future challenges will include the need to get these blood products to an austere environment in the field.

"The research projects out there are to freeze-dry these blood products so that they are stable and lightweight, and all you need to do is add the water back to use them," Baer said. "So freeze-dried plasma and freeze-dried platelets are sort of the next iteration of these investigations for an enhanced capability to give to the medics. We're not there yet. It's currently under research. But we're investing in it."

"The pattern is always the same," he continued. "We identify a problem. We get the data to make sure it's a real problem. We address that problem. Then we measure how well we have addressed it, to make sure we are doing the right thing. If we need to make adjustments, we make adjustments. If it needs laboratory research, we've got a big laboratory with lots of smart people who can work on it. If it needs clinical research, we have physicians and scientists who can do that. And we can get the answer and get it out to the battlefield quickly."

Other recent USAISR efforts in support of soldiers and medics have involved pain control, which is a significant medical issue throughout the evacuation chain. One representative project now under way is exploring replacement of the medics' morphine treatments with a ketamine product.

"The downside of morphine is that it can be a little hard to titrate—a little hard to get the right dose," Baer explained. "If you give too much, you can cause respiratory depression. Then you have to put the Ambu bag on and breathe for the patient. Also, because of its psychoactive effects, you have to take that patient's weapon away from him. They're really not able to perform any duties. Ketamine is a widely used drug in emergency room settings in the United States. It can provide good pain relief and has a very large safety window so that the dosing isn't as sensitive. There's even a potential that soldiers can at least assist in their own defense and evacuation, which is not the case with morphine."

Other ongoing work ranges from both training and materiel efforts toward hypothermia prevention—even in hot climates—to longer-term research into capabilities like the regeneration of skin, bone, muscle, nerves and blood vessels as a means of restoring lost tissue.

Regarding the seemingly exotic attempts at regenerating lost tissue, Baer said, "That's really the future of treating traumatic injuries—restoring the function that has been lost. Our timeline is in three to five years for some of this stuff. We're not going to grow a new arm in that period, but for things like skin, we're looking for an off-the-shelf skin replacement that replaces all the functions of skin. Instead of taking skin off one donor site to replace another, skin would come 'off the shelf' to replace what may have been injured or lost. I think that will be available in three to five years."

"Our future is that we're doubling in size," Baer concluded. "The Battlefield Health and Trauma Research Center of Excellence is being built in front of our building. All of the people working combat-casualty care—tri-service—are going to be here, colocated where the patients are, because that's such a successful model for developing treatments to address the injuries."

Advanced Black Hawks Replace Medical Company's Squadron Of Huey Air Ambulances

By Jerry Duncan



he 832nd Medical Company (Air mbulance), Wisconsin Army Na- onal Guard, in West Bend, Wis., ill have its full complement of H-60 Black Hawk helicopters by ummer's end.

The Vietnam Era is ending somewhat later than anticipated for the 832nd Medical Company (Air Ambulance), Wisconsin Army National Guard, in West Bend, Wis. In 2008, the unit began replacing its Vietnam War-vintage Bell UH-1 Iroquois (Huey) helicopters with the newer, advanced UH-60 Black Hawk helicopters. Sometime this summer, the last remaining Huey will leave the unit to be decommissioned in Temple, Texas.

The versatility and reliability of the UH-1s prolonged their service life as air ambulances in West Bend long after the



The 832nd Medical Company's last UH-1 will be decommissioned in Temple, Texas, this summer. The reliability and versatility of the venerable Vietnam War-vintage helicopters—along with the war in Iraq—extended their use long after the war ended in 1975.

Vietnam War ended in 1975. The Iraq War, which began in 2003, also delayed this transformation.

"Before 2001, the Army told us that by the end of 2003, there would be no more Hueys in the Army system," said MAJ Matthew Strub, the 832nd's flight facility commander.

"That was before 9/11 and before the Iraq War. Resources were diverted to Iraq, so we couldn't replace the UH-1s because their UH-60 replacements were being used in theater. It delayed the whole transfer process."

The scheduled transformation resumed in May 2008 when the first Black Hawk arrived in West Bend. After that, UH-60s regularly arrived to replace Hueys. By late April 2009, the medical company had nearly completed the transformation, with six UH-60s and only one Huey remaining in the hangar. MAJ Strub predicts the unit will have its full complement of nine Black Hawk helicopters by early July.

Built for Survivability, Speed & Hauling Capacity

The UH-60 Black Hawk is the Army's designated successor to the Huey helicopter. Beginning manufacture in the early 1970s, the many variants of the Black Hawk are loaded with advanced technology, including heads-up display, global positioning system, sophisticated self-monitoring electronics that can pinpoint developing problems and state-of-the-art avionics that reduce pilot workload by integrating flight instruments in fewer panels.

During UH-60 research and development, the Army

MAJ Matthew Strub, flight facility commander of the 832nd, is qualified to fly both the UH-1 and the UH-60. "Flying the Black Hawk," he says, "is a lot more technical."



Jerry Duncan is a freelance writer and a PR account executive from West Bend, Wis.

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Faster, more durable and more powerful than the Huey, the UH-60 Black Hawk features a fully articulated rotor system, two turboshaft engines, more internal space and rugged airframe design.

experimented with assault version prototypes that could carry an array of machine guns, rocket launchers, grenade launchers, miniguns, Gatling guns and autocannons.

Black Hawks that perform assault mission roles today typically serve as troop carriers, capable of bringing 11 fully equipped soldiers into combat zones, although "hard points" are available on the aircraft to allow conversion to offensive versions of the UH-60 if necessary.

The 832nd Medical Company is outfitting with mid-1980s vintage UH-60A (Alpha) and UH-60L (Lima) versions, some of which will come from the Madison-based 1-147th Assault Helicopter Battalion, which is upgrading to the newer UH-60M (Mike) model. Technically, the Alpha and Lima variants were not designed for medevac missions, as is the rarer and more costly UH-60Q Black Hawk, but it has been relatively simple to retrofit the UH-60A and UH-60L ships with the proper equipment, according to MAJ Strub.

"We just took the rescue hoists from the Hueys and modified the internal configuration of our Alpha and Lima aircraft to provide oxygen and electricity for suction and ventilators, and added the carousel system for patient litters," he explained.

With its two turboshaft engines, larger internal space and rugged airframe design, the UH-60 also is a faster, more powerful and more durable aircraft than its Huey predecessor. The Black Hawk's total payload capacity is 22,000 pounds and cargo-hook lift limit is 8,000 pounds—both roughly double that of the UH-1. Maximum and cruising speeds are nominally faster for the UH-60s. The Black Hawk's weather tolerance is superior to that of the UH-1 by virtue of blade de-icing, and the airframe under the pilot and copilot is designed to absorb crash impact forces by crushing vertically—like a beer can that's been stepped on. "You can actually survive an 11G crash," MAJ Strub said.

In addition, the Black Hawk features a fully articulated rotor system, which eliminates the possibility of mast bumping—when excessive rotor flapping causes the rotor to violently bump against the mast. "Mast bumping can cause the rotor to separate from the mast—which would be disastrous, of course," he said. "In the UH-60, mast bumping is impossible, which gives the Black Hawk a more flexible flight envelope."

Qualified to fly both UH-1s and UH-60s, MAJ Strub can compare the flight characteristics of the respective aircraft. "Flying the Black Hawk is a lot more technical—there's a lot more to learn and remember," he said. "But hands-on is easier, because the aircraft does more for you. The UH-60 doesn't have a full-blown autopilot, but it has many autopilot components, such as autotrim, which enables the helicopter to actually fly itself for awhile. Flying the Huey is fun, too, but it's like flying a sports car versus flying a Cadillac. The Huey is more hands-on."

A complete equipment changeover aside, the 832nd Medical Company's 130 full-time and part-time maintenance technicians, pilots and flight medics have been extraordinarily busy over the last six years, conducting frequent readiness exercises and fulfilling their vital medevac mission.

Missions Accomplished

Officially, the 832nd Medical Company's mission is to provide air ambulance services to soldiers in theater or to the citizens of Wisconsin, and to provide homeland defense and disaster relief. The latter responsibilities can put the 832nd's resources anywhere within range of its aircraft.

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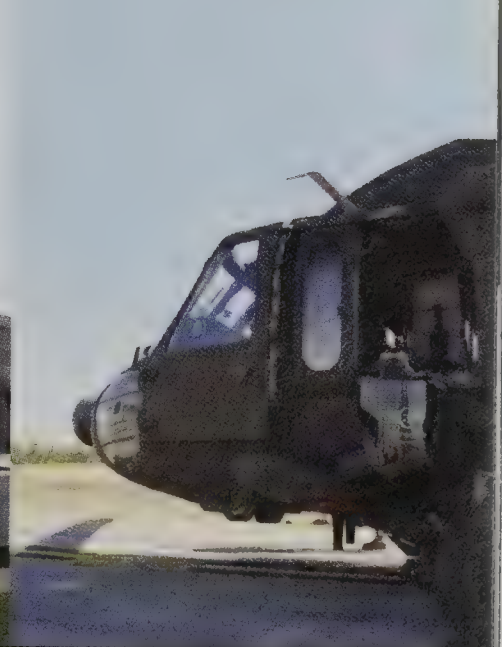
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Above, the patient carousel system of the UH-60 Black Hawk can be stowed; the litters fold up when not in use. Below, soldiers from the 832nd ensure that all flight controls of a UH-60 are correctly rigged; a phase maintenance inspection is required for every 350 hours of flight time.

As recently as April, for example, the medical company performed rescue operations in North Dakota, during that state's late-winter thaw- and rain-triggered flooding. The 832nd's mission involved picking up residents stranded by encroaching floodwaters.

"We were in North Dakota within 24 hours of the call to go there to perform these rescue hoist activities," said MAJ Strub.

In 2005, the Army called on the 832nd to assist rescue operations in the wake of Hurricane Katrina. The typhoon had weakened to a Category 3 storm when it hit southeast Louisiana on August 29, but New Orleans was inundated as the levee system failed catastrophically. Hueys from the 832nd Medical Company and UH-60 Black Hawks from the Madison Guard unit rushed to the scene.

"It was the most devastating thing I've ever seen," MAJ Strub said. "But being there to help the people of New Orleans also was the most rewarding mission I've ever done in the military." The medical company performed nearly 60 hoist rescues during the first 10 days of the deployment.

During 2003–05, the 832nd served a 2½ year deployment to the Pacific Northwest, when the Army activated the medical company to fill in for the active medical company stationed at Ft. Lewis, Wash., when it was deployed to Iraq. While in Washington, the 832nd conducted the Military Assistance and Safety to Traffic mission, providing air ambulance/air rescue, crew, helicopters and associated medical equipment, and personnel to soldiers at Fort Lewis, Yakima Training Center and the greater Seattle, Wash., community.

Along with these critical deployments, the 832nd has been in a continual state of readiness training in the airspace in and around West Bend and southeastern Wisconsin, qualifying the former UH-1 pilots and copilots to fly the Black Hawk and conducting instrument instruction and terrain navigation. In February and March, the 832nd's flight crews flew twice as many training missions to hasten their adjustment to the UH-60s, MAJ Strub said.

While the medical company's new aircraft will increase the capabilities of the unit to carry more patients farther, faster and more safely, the 832nd's mission remains the same—disaster relief response for Wisconsin and the nation.

"We're the same unit, with the same personnel—we just use different pieces of equipment now," MAJ Strub said. "With the transformation to the UH-60 Black Hawks complete, however, we are on the Army's radar screen for eligibility to be deployed overseas. If the current situations in Afghanistan and Iraq continue, this unit will more than likely be deployed." ★

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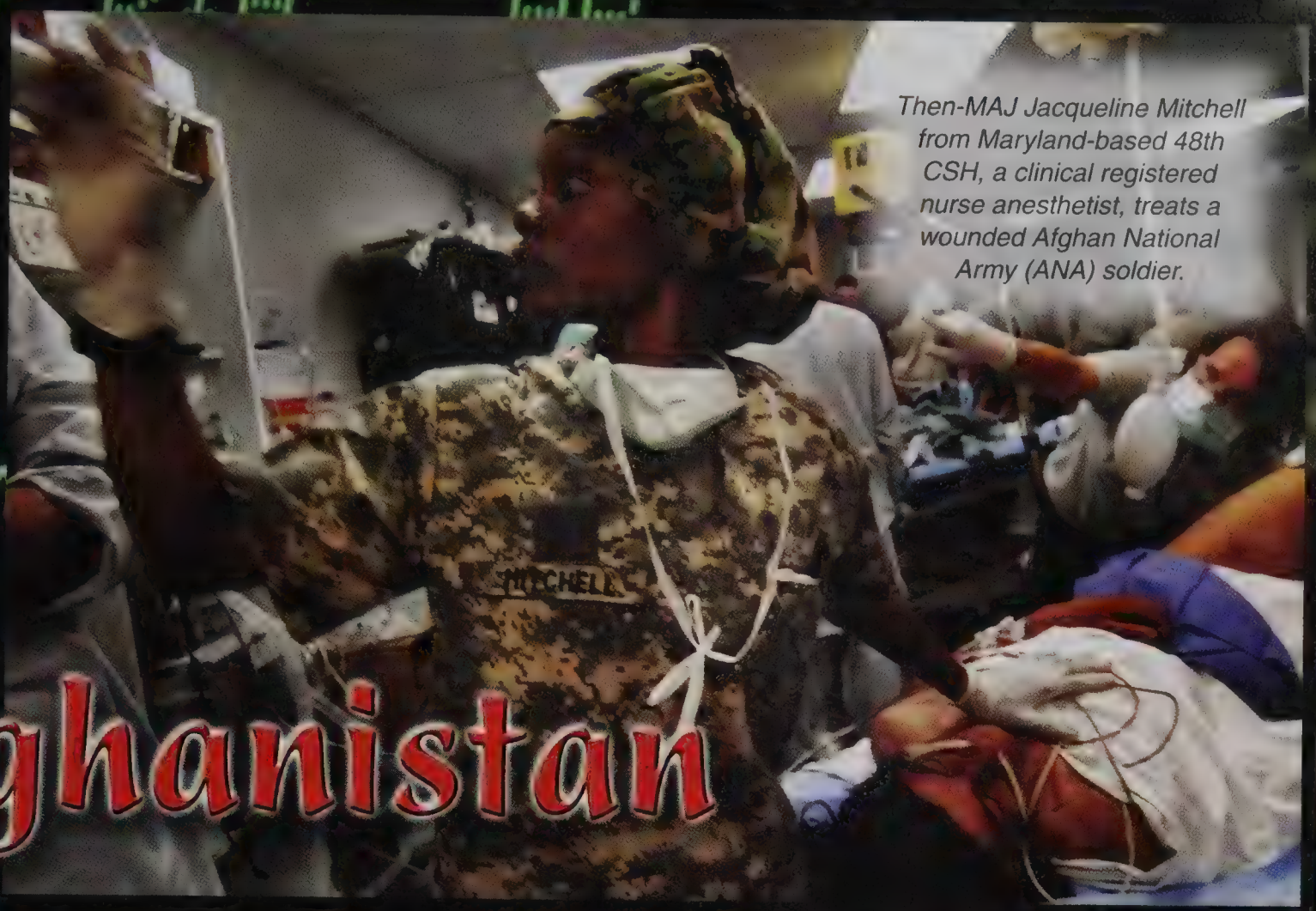
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Saving Lives in

A UH-60 Black Hawk medevac helicopter from Forward Operating Base (FOB) Salerno arrives in a remote part of Ghazni Province to pick up and transport a wounded Afghan civilian to the Salerno Combat Support Hospital (CSH).

Medical personnel hurry a wounded soldier, transported from the site of an improvised explosive device (IED), into the hospital at FOB Salerno.



Then-MAJ Jacqueline Mitchell from Maryland-based 48th CSH, a clinical registered nurse anesthetist, treats a wounded Afghan National Army (ANA) soldier.

Afghanistan

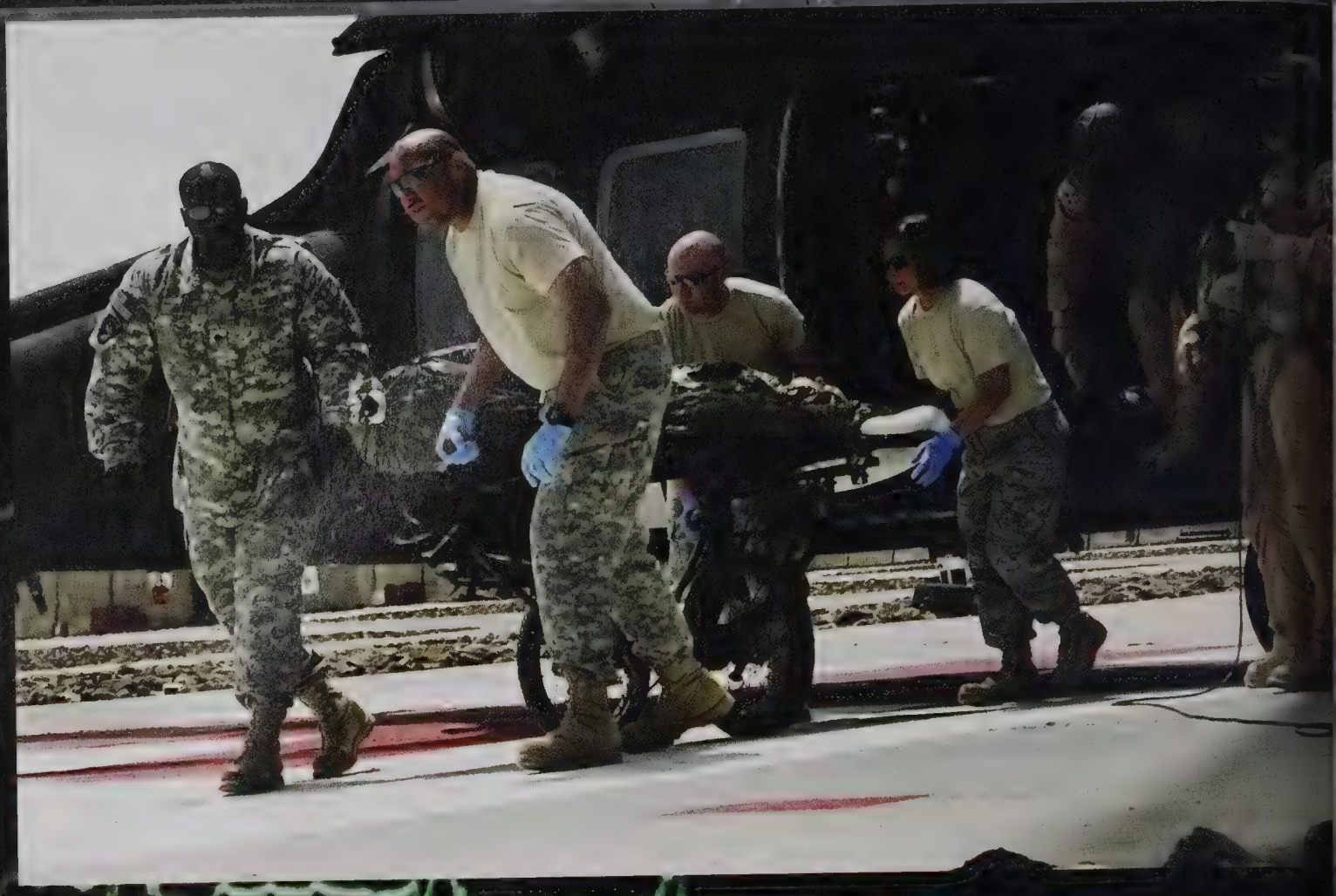
Text and Photographs by Paul Avallone

The U.S. military's major trauma center in southeastern Afghanistan, the Combat Support Hospital (CSH) at Forward Operating Base (FOB) Salerno, was a busy place in 2008, as the increase in the Taliban insurgency and the American and Afghan offensives against the insurgency resulted in a far greater number of combat casualties than in years past. Staffed and administrated in 2008 by the U.S. Army's 48th CSH, then the 349th CSH, the hospital was a mixture of Army and Air Force medical personnel. With a fully equipped two-table operating room and a four-station trauma center (including CAT scan), the hospital can easily accommodate the normal flow of a handful of casualties, with litter-stands set up in the ICU and corridors on days of mass casualties, such as August 18, 2008, when a vehicle-borne improvised explosive device was detonated at the Afghan laborers' gate of the FOB, killing six and wounding 16 locals—all then brought to and treated at the CSH.

During a nine-month embed with the 4th Brigade Combat Team, 101st Infantry Division (Airmobile), headquartered in 2008 at FOB Salerno, photographer Paul Avallone chronicled some of the daily lifesaving of the CSH during various stops at the base.



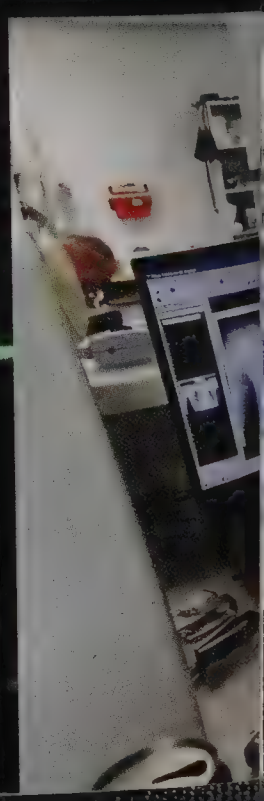
SGT Brita Dunmire monitors a wounded ANA soldier who has been stabilized and prepared for surgery or transport to the larger hospital at Bagram Air Base.



Hospital staff transport an American soldier wounded in an IED explosion from the medevac helicopter to the hospital.



Medical staff perform lifesaving surgery on one of the civilian victims of a vehicle-borne IED attack.



MAJ Paul Schenarts, a trauma surgeon with the 48th CSH, studies the X-ray of a wounded ANA soldier.

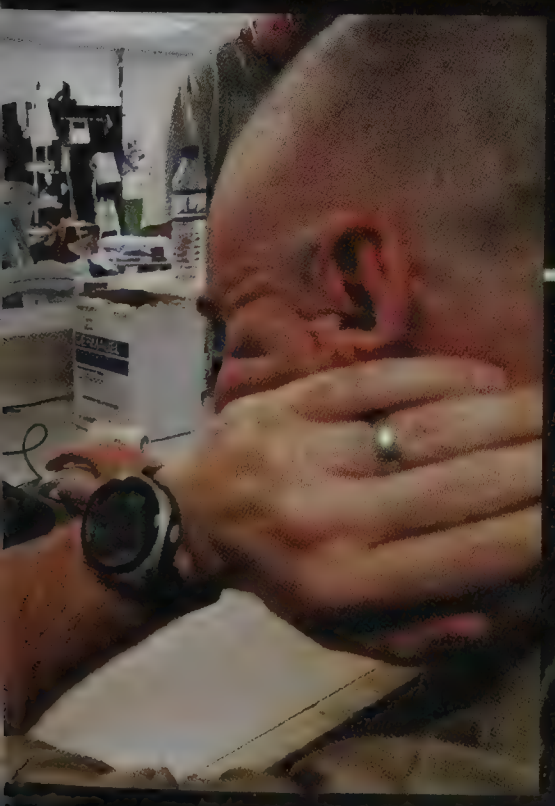


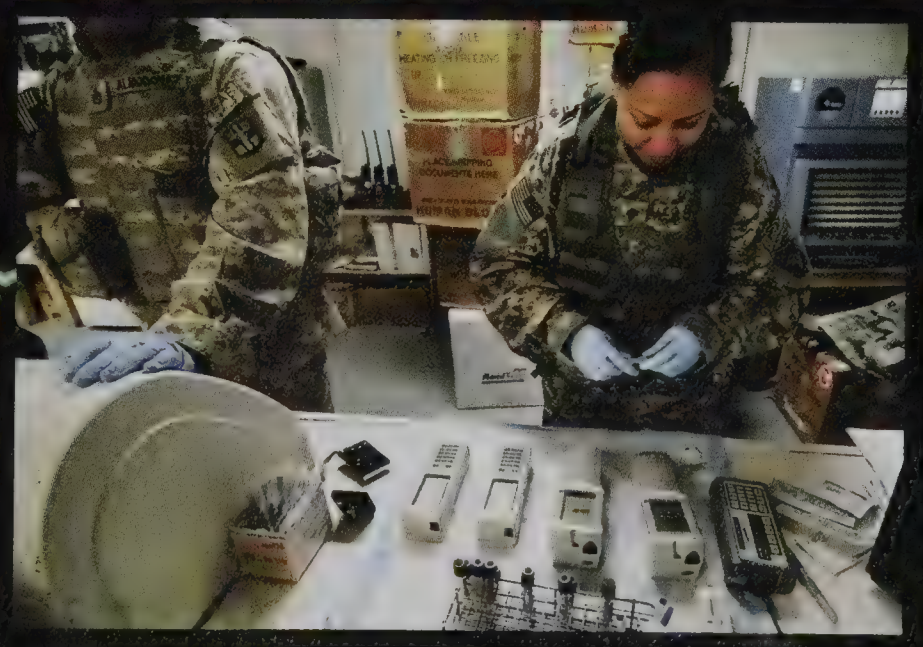
Members of the 349th CSH attend an Afghan National Police officer who survived a devastating truck-bomb attack 20 kilometers from FOB Salerno.





Below left, MAJ Tammy Polorney, a registered nurse, checks on a wounded ANA soldier. Below right, medical technicians of the Army and Air Force work together seamlessly performing blood analysis on trauma patients.





The staff of the CSH wear body armor while performing their jobs, a necessary precaution at FOB Salerno after multiple suicide bombings in nearby Khowst City.


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Combat Injuries Spur Medical Innovations

By Toni Eugene
Associate Editor

Two years ago in Baghdad, Iraq, LTC Greg Gadson, commander of 2nd Battalion, 32nd Field Artillery, 1st Infantry Division, ost both of his legs above the knee when his con-oy was hit by a roadside bomb. In April, LTC Gadson became the first person in the world to eceive the most technically advanced mechanical egs, which feature battery-powered knees. His ew prosthesis, the Power Knee2, is lighter, qui-ter, smaller and more powerful than the original ower Knee, which was introduced three years go. Sensors and artificial intelligence in the knee ot only react to movement, but also anticipate ; the prosthesis, in effect, "learns." Instead of imply offering resistance so the user can walk, he electronic knee helps propel him, reducing the xtra workload of walking with prostheses. The nprovements to the Power Knee and other pros-hetic devices were based on feedback from LTC Gadson and other amputees at Walter Reed Army Medical Center (WRAMC), Washington, D.C.

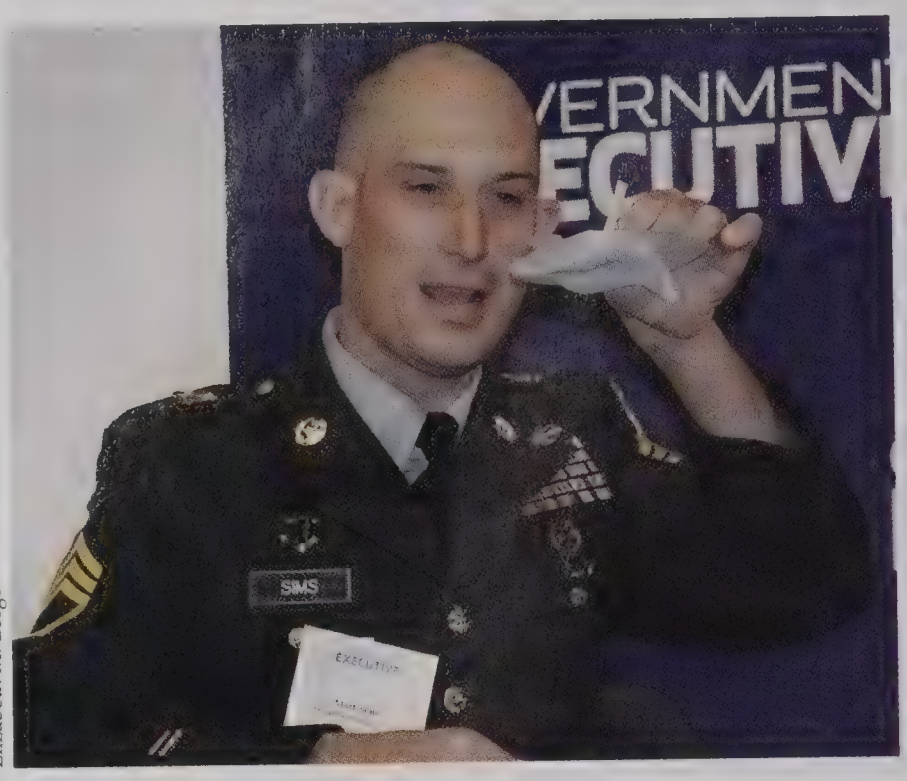
The current wars in Iraq and Afghanistan ave encouraged research and development in he prosthetics industry. Historically, war has ushed medical innovations and sped technolo-ies already in development. The use of tourni-uets and amputation to save lives dates back to oman times. During the Spanish-American War, fewer than 400 U.S. soldiers were killed in ombat while more than 2,000 contracted yellow ever, spurring MAJ Walter Reed and other med-al professionals to confirm that the disease is arried by mosquitoes. Blood transfusions were erformed on the battlefield during World War and World War II accelerated the development f mass-produced penicillin. Helicopter trauma ansport began during the Korean War. Aiding ombat casualties has led to advances in tech-ologies and treatments that later benefit the vilian population.



Craig Coleman, Walter Reed Public Affairs

LTC Greg Gadson, who lost both legs above the knee to a roadside bomb in Iraq, tries out his Power Knee2 prostheses with the help of Michael Corcoran.

While treating blood loss in battlefield casual-es in Iraq and Afghanistan, medics and doctors have arned several ways to raise survival rates, among them ncreasing the ratio of red blood cells to plasma in transfu-ons and creating a tourniquet that can be applied with he hand. The Asherman Chest Seal, a bandage and one-way valve that allows the air out of a punctured lung, is another lifesaver, as is Combat Gauze, which uses a fine clay to help staunch bleeding. Surgeons have also found that in head trauma conditions, removing a section of skull, even when no shrapnel is in the wound, relieves



Elizabeth M. Lorge

SSG Matt Sims, an Army medic, demonstrates the Asherman Chest Seal, a bandage and one-way valve that lets the air out of a punctured lung.

pressure that might otherwise render a patient brain-dead.

Better preparation and equipment have contributed to saving lives. Medics are better trained than before; every soldier is trained and equipped as a combat lifesaver and carries an up-to-date first-aid kit. Body armor, helmets and mine resistant ambush protected vehicles help shield soldiers from bomb blasts. Gear and safety precautions combined with improvements in trauma treatment have resulted in a better survival rate: 90 percent of those wounded in Iraq and Afghanistan come back alive, according to the U.S. Army Medical Department, the highest percentage of any war. (During World War II, the figure was 60 percent.)

Many soldiers who would have bled to death from the loss of a limb or died from head or torso wounds now survive. Blast-injury victims like LTC Gadson are surviving in record numbers. According to a 2004 Senate report, amputees made up about 3 percent of the wounded in previous wars, compared to 6 percent of those injured in Iraq.

As of April 1, more than 870 amputee servicemembers wounded in Iraq and Afghanistan have been treated in military facilities; 665 of them were soldiers. That figure is a small percentage of the total number of amputees in the United States, most of whom are diabetic or beyond middle age. Military amputees are younger, healthier, fitter and more active than most other amputees. "The wear and tear exerted on lower limbs by civilians is different from that exerted by servicemembers," LTC (Dr.) Paul F. Pasquina, chief of Orthopaedics and Rehabilitation at Walter Reed Army Medical Center, told ARMY Magazine in a telephone interview. "Servicemembers make demands not made by civilians." The military, strongly committed to amputee care, willingly invests in research and development of new prosthetics in addition to providing prostheses—many of which cost tens of thousands of dollars—free of charge to wounded servicemembers.

LTC Pasquina said that roughly "17 to 20 percent of amputees with major limb loss elect to stay on duty. They get a disability rating as is standard, then file a continuation on active duty form." LTC Pasquina explained that "amputees who deploy do so with a second leg and backup kits in their backpacks when on patrol." Amputees at WRAMC also select their own prostheses from various components. "Industry-standard prosthetic devices are not combat-tested. Servicemembers who have lost legs and gone back to deploy give feedback to the WRAMC prosthetics lab," he said.

Upper-limb prostheses have changed little since World War II. According to LTC Pasquina, there are basically three types. The first, body-powered arms, have hooks manipulated by cables and harnesses and are controlled by movements of the shoulder, arm or chest. Myoelectric arms have joints powered by electric motors and are controlled by electrical signals on the surface of the skin from an amputee's chest muscles and remaining arm. The third type is a hybrid of the first two—a cable might control the elbow, for example, while a myoelectric sensor controls the hand. All offer relatively limited degrees of motion and generally allow only one motion at a time. A typical artificial hand would move three fingers in a pinching motion. Walter Reed fits all upper-limb amputees with all three systems, and prostheses are prescribed based on the



DoD/Fred W. Baker III

Army National Guard SPC Marco Robledo, hooked into a safety harness, practices walking at the Military Advanced Training Center at Walter Reed Army Medical Center.

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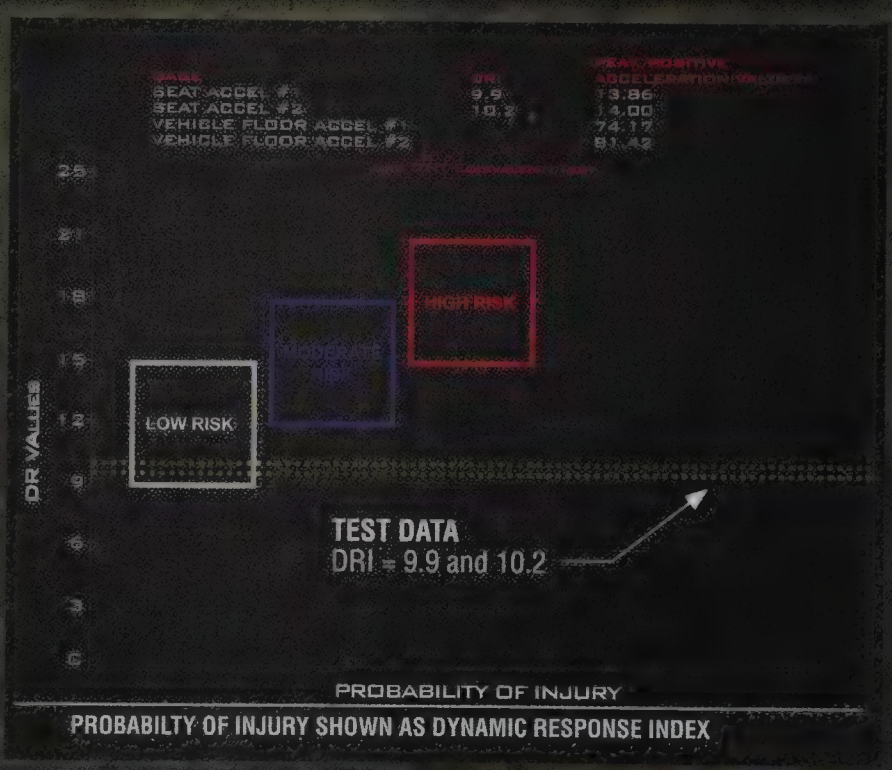
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SGT Juan Arredondo, USA Ret., whose left hand was severed by a bomb in Iraq, praises the functionality and natural movement of the i-LIMB prosthesis.

patient's long- and short-term goals.

The roadside-bomb attacks prevalent in Iraq and Afghanistan have increased the number of combat amputations involving the upper extremities. The Department of Veterans Affairs (VA) estimated that in the Vietnam War era, hand and arm amputees represented only about 4 percent of its patients who had lost a limb from wartime injuries. Walter Reed statistics indicate that more than 20 percent of the combat-casualty amputees from Operations Iraqi Freedom and Enduring Freedom treated in military facilities have had upper-extremity involvement.

In February 2005, then-SGT Juan Arredondo, 2nd Infantry Division, was driving on patrol in Ramadi, Iraq, when a cell-phone-detonated roadside bomb exploded near his Humvee. The blast severed his left arm just below the wrist. Arredondo stuffed the hand into his cargo pocket for the 30-minute drive back to base, but doctors at the combat-support hospital found it too damaged to reattach. In late 2007, when a prosthesis called the i-LIMB was introduced, Arredondo became the first soldier to use it.

The i-LIMB, which weighs slightly more than a pound, has a micromotor in each finger and mimics the movement of the human hand. Arredondo flexes the inside muscles of his forearm to close the hand and the outside muscles to open it. With his previous prosthetic hand, he could only form a C, working the fingers like a pair of tweezers. With the i-LIMB, he can make a fist, pick up an egg and play football with his children. Each finger's motor stops when it encounters resistance, so Arredondo can pick up and eat a grape without crushing it. The i-LIMB enables amputees to perform tasks previously difficult or even impossible, such as turning a key or a doorknob.

Like the Power Knee2, the i-LIMB has been improved based on feedback from Walter Reed patients. The first iteration proved too delicate, so the manufacturer strengthened the tendons in the fingers, added aluminum support to the thumb, flattened the fingers to improve the grip and improved the thumb cover. By last summer, some 200 people around the world had been fitted with i-LIMBs. Among them was SSG Paul Russell (Russ) Marek, one of the first to have the prosthesis fitted by the VA.

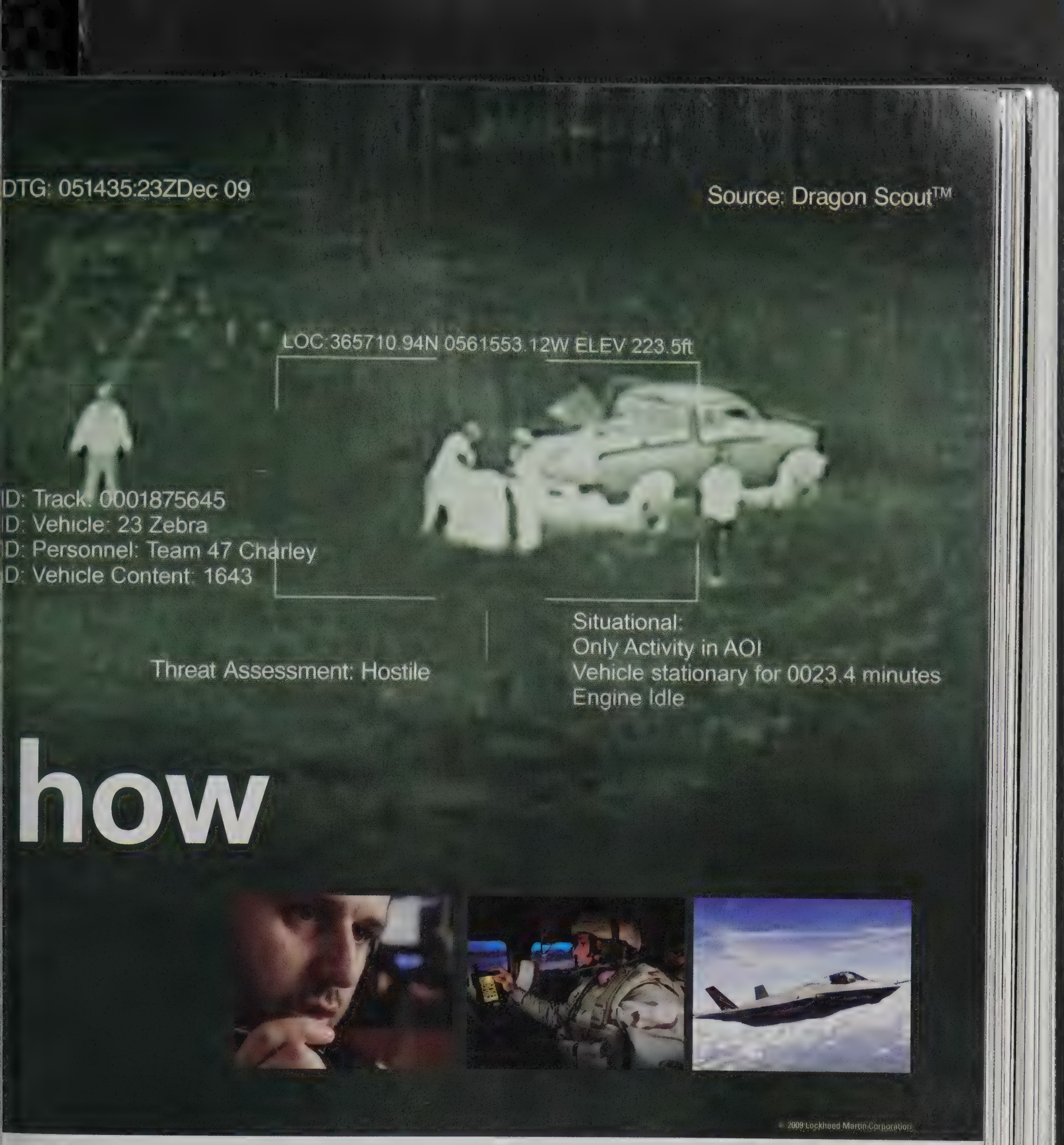
SSG Marek was serving with the 4th Battalion, 64th Armor Regiment, 3rd Infantry Division, in Iraq in 2005. He was in command of an Abrams M1A1 tank when it was destroyed by an improvised explosive device that killed his three crewmembers near Baghdad. SSG Marek's left arm and leg are paralyzed; he lost his right leg, and his right hand had to be amputated. "It's like I've got a real hand again," SSG Marek says of the i-LIMB.

An even more technologically advanced upper-limb prosthetic device is in the works. "Early in the wars," LTC Pasquina said, "scientists and leaders from the Defense Advanced Research Projects Agency (DARPA) met with WRAMC and VA clinicians and agreed that industry was already investing in research and development for lower-limb prosthetics, but that little was being done with upper-limb prosthetics because there was a small market for them." In 2005, DARPA initiated its revolutionizing prosthetics program. The agency has invested more than $100 million in its efforts to produce a prosthetic arm that will mimic the physical properties and sensory perceptions of the human arm. LTC Pasquina expects that two new prosthetic arms "will move to clinical trials soon." Both will allow simultaneous motions and will better replicate the movements of the human arm.

LTC Pasquina believes the determination of patients and families is as important as technology to the success of these new devices and credits recent advances to the willingness of amputees such as LTC Gadson to push themselves. There are many similar success stories.

As SPC Jake Altman was clearing mines in 2007, he lost a hand when a roadside bomb struck his vehicle. After treatment and rehabilitation at WRAMC, he learned how to perform his duties with a prosthetic hand and returned to Iraq. This past spring, former SSG Jonathan Holsey, who lost a leg to a roadside bomb in Iraq in 2004, became the first amputee to attend the Warrant Officer Career College.

The military's commitment to providing the most advanced medical and rehabilitative technologies to injured servicemembers has enabled some to return to duty. Others, like LTC Gadson, continue to test new devices and suggest improvements. All benefit from medical innovations endowed by the military and inspired by the desire to help those wounded in war.



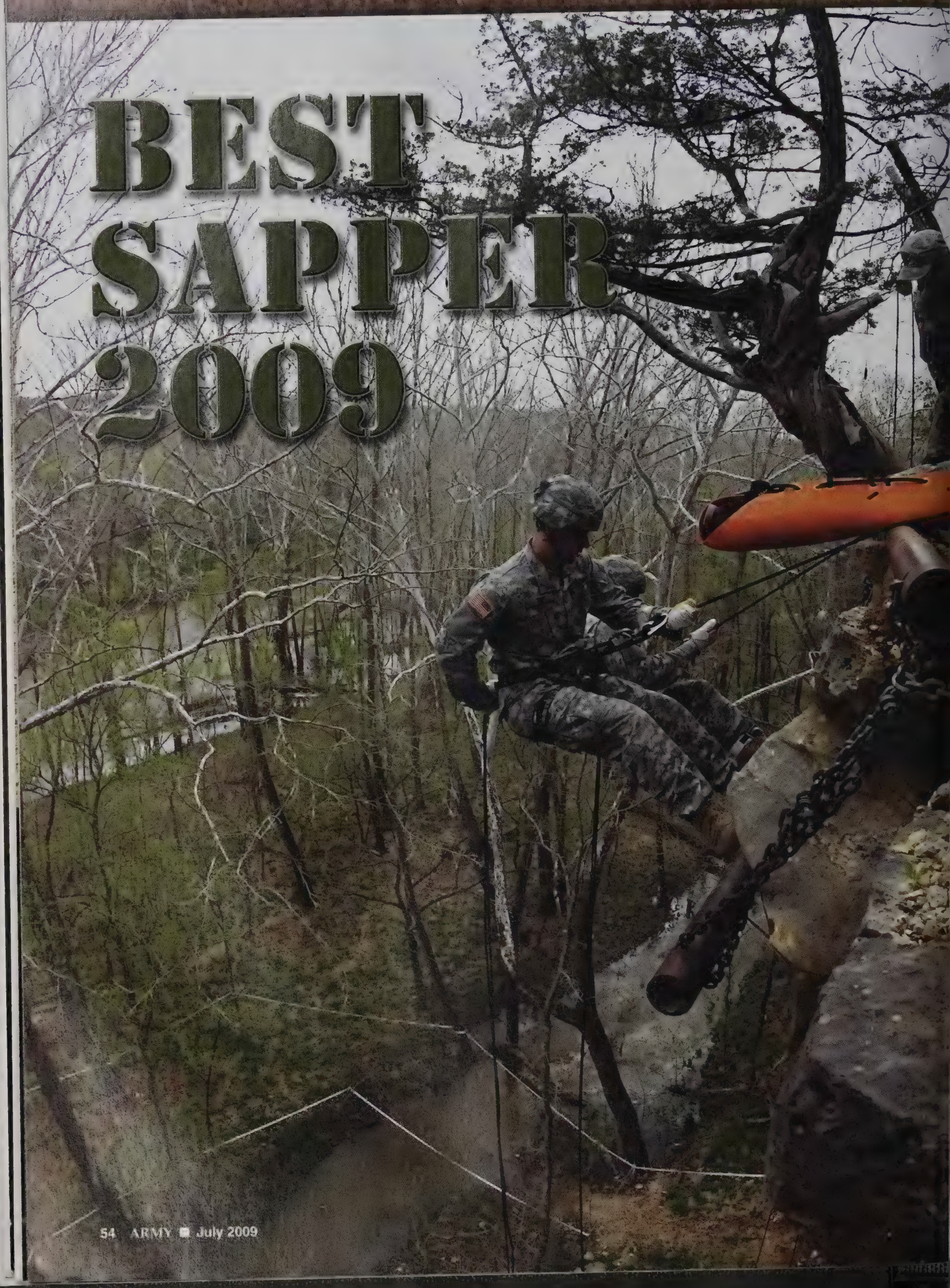
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BEST SAPPER 2009





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Text and Photographs
By Dennis Steele
Senior Staff Writer

Clipped onto mountaineering ropes at the top of the cliff—a sheared-off slab of dolomite rock situated in the Fort Leonard Wood, Mo., training area and with a 90-degree, 90-foot drop to the creek bank below—each of the 34 two-soldier teams competing in this year's Best Sapper Competition had a third partner for a few minutes—a 150-pound casualty dummy called Rescue Randy that was strapped into an orange plastic Skedco litter folded around the victim like a sawed-off taco shell.

The challenge was straightforward: Secure Randy in the Skedco correctly and get him down the precipice as quickly as possible after SSG Raymond Helvig said "Go!" and clicked a stopwatch.

A cadre instructor from the Sapper Leader Course (Company E, 554th Engineer Battalion, the Best Sapper Competition's sponsoring unit), SSG Helvig nimbly patrolled the boxing ring-sized clearing at the top and served as judge, jury and chief executioner of the competition's "Skedco/Jumar assault lane." (A Jumar is a mountaineering device that assists in climbing back up a cliff, which was the second part of the event.)

SSG Helvig judged the teams' skill in lashing Randy to the litter, performed safety checks and choreographed the rough-hewn ballet to position competitors dangling over the cliff's edge and set the litter into the ready position. He leaned over the ledge as each team went down, observing its progress in nursing (some, admittedly, more strug-



Competitors perform pull-ups as part of the modified physical fitness test conducted during the predawn hours of the opening day of the Best Sapper Competition.

gling and cussing than nursing) Randy down the cliff while barking orders to the rope team manning the brake lines at the top.

It was suggested that the cliff, which lacks a proper name, be named for SSG Helvig: Helvig's Cliff—a notion embraced enthusiastically by SSG Helvig and unopposed by anyone else, as everyone working for him just wanted to get off the cliff without getting on his bad side, and thus kept their mouths shut.

SSG Helvig has been involved in planning and conducting the Best Sapper Competition since he joined the Sapper Leader Course cadre.

"As soon as last year's competition ended, we started planning this one," he said. "About three months out, we really get hot, and one month out we validate [the event lanes]—all of that for one day, one event, but it's really worth it to stage this competition. These guys get a lot out of it."

The annual Best Sapper Competition started five years ago with six teams competing, all of which were stationed at Fort Leonard Wood. This year, 34 teams representing units from around the Army came to participate, a benchmark that allows sponsors to believe that the Best Sapper Competition has achieved the strategic goals that drove its inception—establishing a world-class event that is unique, testing sapper and basic military engineer skills, and serving as a source of pride for the entire Engineer Regiment.

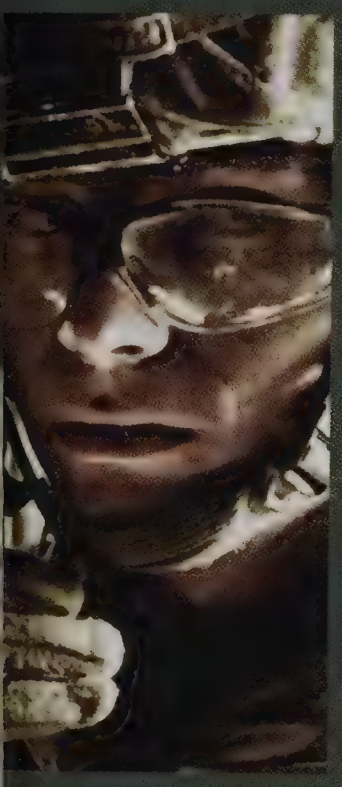


SSG Boulina Rasavong and SGT Alan Forester—representing the 20th Engineer Battalion, 36th Engineer Brigade, Fort Hood, Texas—carry their poncho raft to the helicopter pickup zone.

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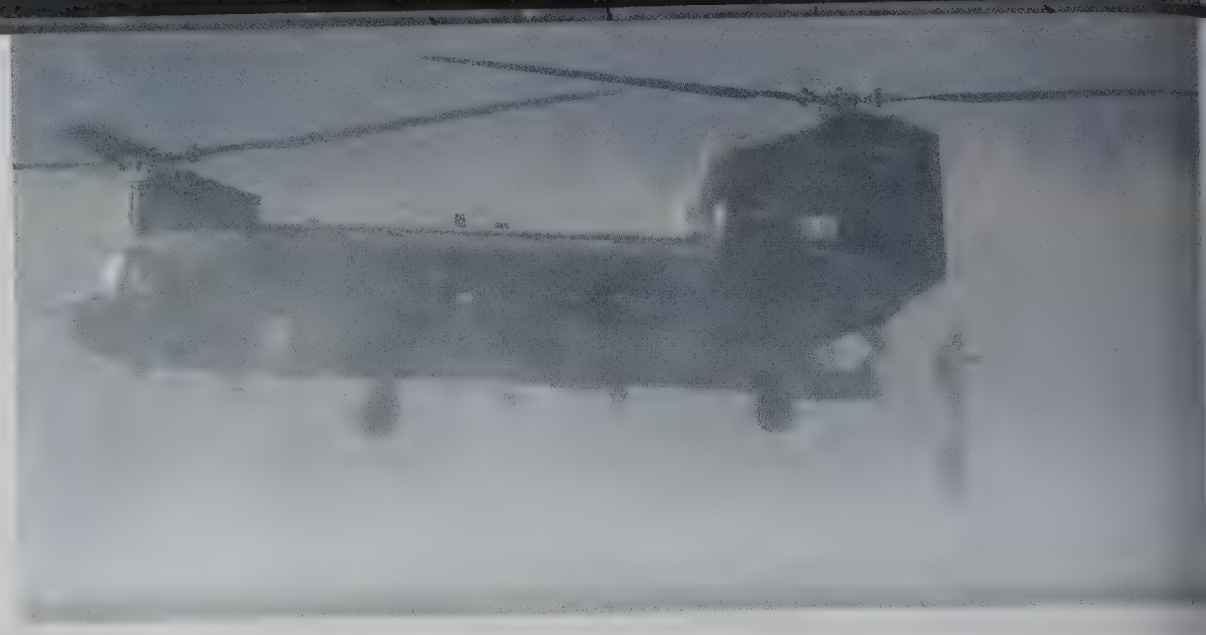
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A team leaps from a CH-47D helicopter into the water during the helocast/swim event.

"Word has gotten out," said one cadre member.

The Best Sapper Competition spans four days—one administrative day and 52 hours for the physical competition, followed by a small get-together and the award ceremony.

Aside from the skill sets tested, the competition is different from others in the Army in that there is no leader board. No team knows its ranking as the competition progresses. The field is cut, however, at the end of the first day to 20 teams and at the end of the second to 10 teams, which continue to the final round.

The first day of competition started at 3:45 A.M. with a nonstandard physical fitness test. Sit-ups, push-ups and pull-ups were counted in the dim illumination of fluorescent lamps in a semirigid, hangar-like building, followed by a 3-mile run in the dark with participants wearing headlamps—a moving cluster of bobbing light specks.

That was followed by the helocast/poncho raft event, arguably the most spectacular event and the one most accessible to the public, a crowd-pleaser in every respect. With their rucksacks tied into a poncho raft, teams jump from the ramp of a Chinook helicopter into a lake, line up and swim to shore as fast as they can.

Following was a round-robin series of events that tested basic soldier skills such as marksmanship and engineer skills such as specialized demolition—all of which are sapper skill sets.

After that, teams had the opportunity to sleep for four hours (optimally, but probably less) and then went on a rucksack road-march of 15½ miles



Soldiers struggle ashore after completing the swim.

A competitor gives it his all to shave seconds off his team's swim time.

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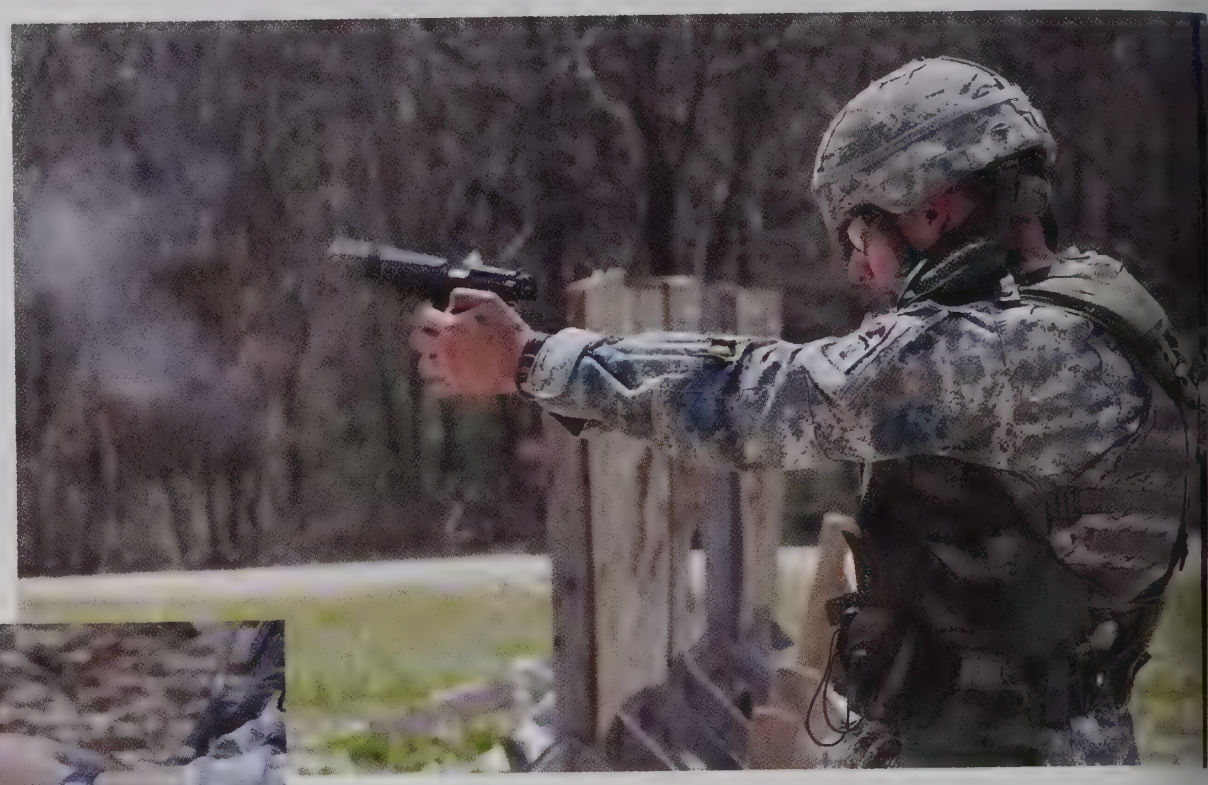
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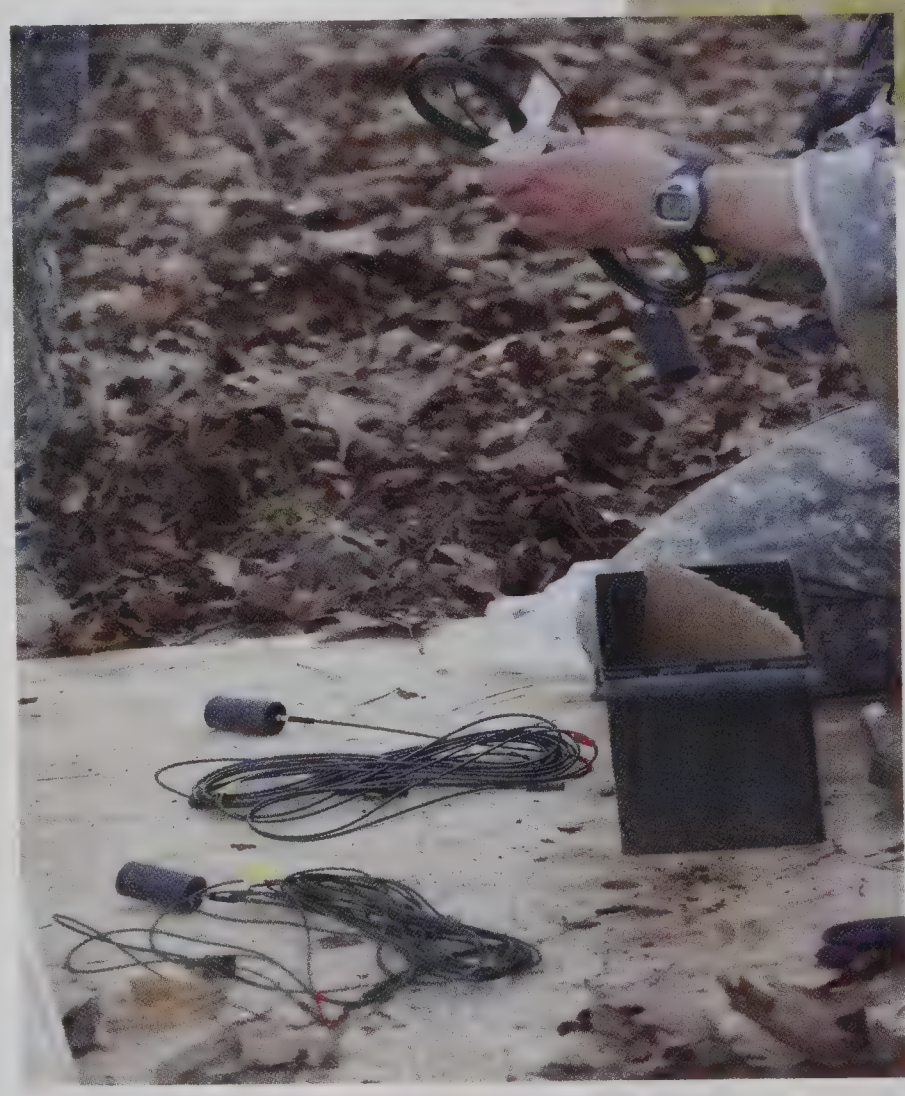
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1LT Michael Leak from the 31st Engineer Battalion, 1st Engineer Brigade (31st Eng. Bn., 1st Eng. Bde.), Fort Leonard Wood, Mo., fires an M9 pistol during the stress-fire marksmanship event.

A soldier unpacks demolition material to prepare breaching charges.

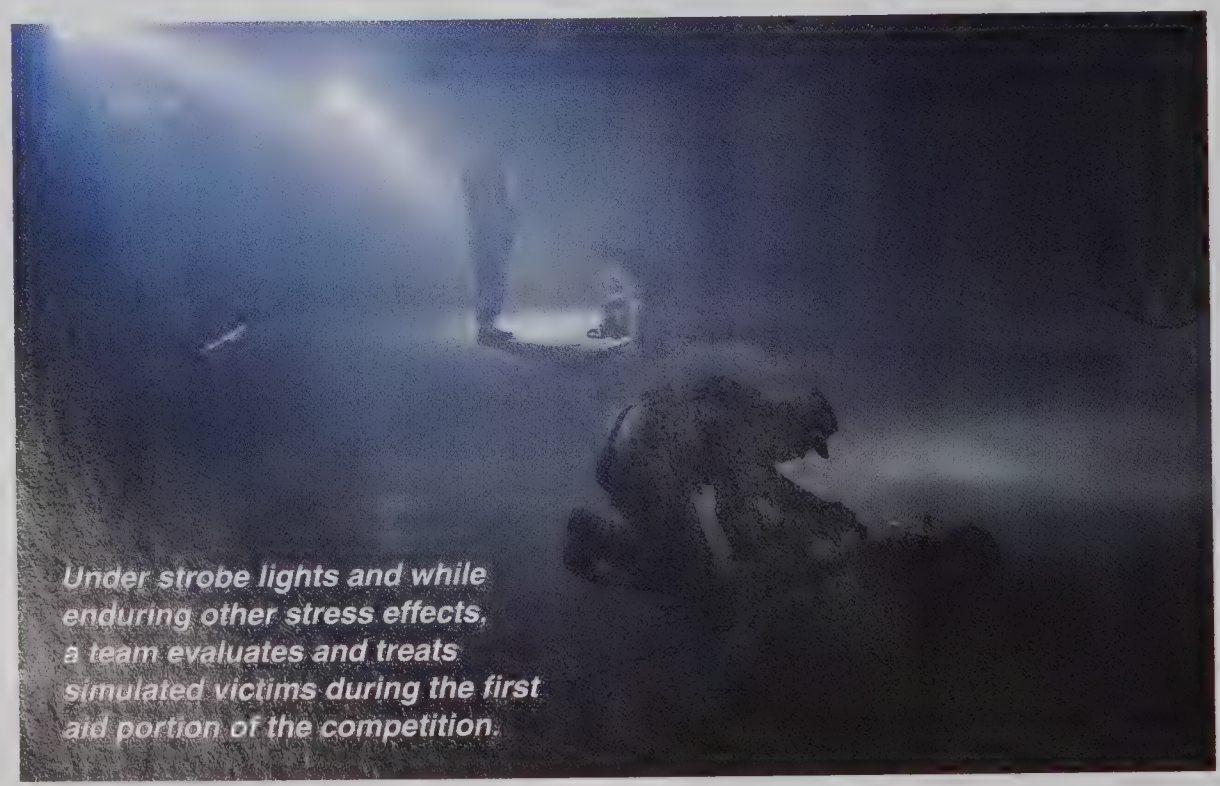


with a four-hour cutoff time. Whittled down by the road march to 20 teams, the continuing teams were allowed 2½ hours of rest before heading to the second day's events, revolving around the "sapper stakes," which interlace specialized engineer events with physical fitness events such as an obstacle course, after which teams must road-march to each testing lane.

After two more hours of rest, teams compete on a night land-navigation course. Cut to 10 teams by their land-navigation times, and after a minimum rest time of an hour and a half, the final (and butt-kicking) phase begins: the X-Mile Run, which involves running but is better described as a physical beat-down.

This is the X-Run task menu: Run the first half-mile wearing protective masks; remove masks and continue running to the log cut-and-carry event—saw through a log with a two-man crosscut saw, then pick up a 150-pound log section and run to the next event, the Bangalore crate carry—run to the next event carrying a full rope-handled Bangalore torpedo crate. Then teams move a pile of dummy M-15 antitank mines through a short obstacle course (carrying one or two mines at a time) and continue running after completion. Next is a truck-tire flip and a run to the picket-pounding station (where teams hammer pickets into the ground). Teams run on to the dummy carry, run on to a sandbag carry and run to the final event, door breaching—breaching two doors by hand—followed by a short sprint to the finish line. The fastest time was 8 minutes flat. The total distance was 8 miles.

From beginning to end, the 2009 Best Sapper Competition covered more than



Under strobe lights and while enduring other stress effects, a team evaluates and treats simulated victims during the first aid portion of the competition.



MAJ Stephen Peterson, 31st Eng. Bn., 1st Eng. Bde., crawls under the water-hazard log on the physical endurance course.



CPT Joshua Eggar and 1LT Christopher Williammee, representing the 72nd Engineer Company, Fort Riley, Kan., traverse the three-rope bridge on the physical endurance course.

miles (running or road-marching) and more than 30 separate events.

The winning team, earning the 2009 Best Sapper title, as 1LT Shawn Hogan and MSG Michael Behkendorf, representing the 7th Engineer Battalion, 20th Engineer Brigade, rt Drum, N.Y.

Placing second were CPT Mark Gillman and SSG Gordon Paulson, representing the 66th Engineer Company, 25th Infantry Division, Schofield Barracks, Hawaii.

To the surprise and delight of the crowd attending the award ceremony, a team of West Point cadets placed third: CDT Jonathan Kralick and CDT Dominic Senteno, representing, of course, the U.S. Military Academy, West Point, Y., and intending to branch as Engineer officers.

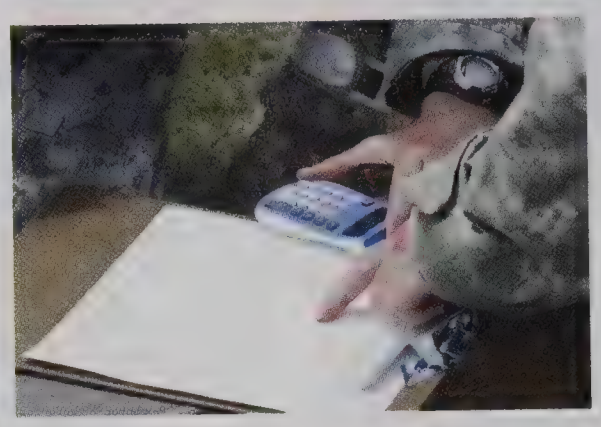
Pointing to MSG Behkendorf, 1LT Hogan said the tough- part of the competition was "keeping up with him." SG Behkendorf has competed in the last three Best Sap- r Competitions, placing in the top-10 finishers the first

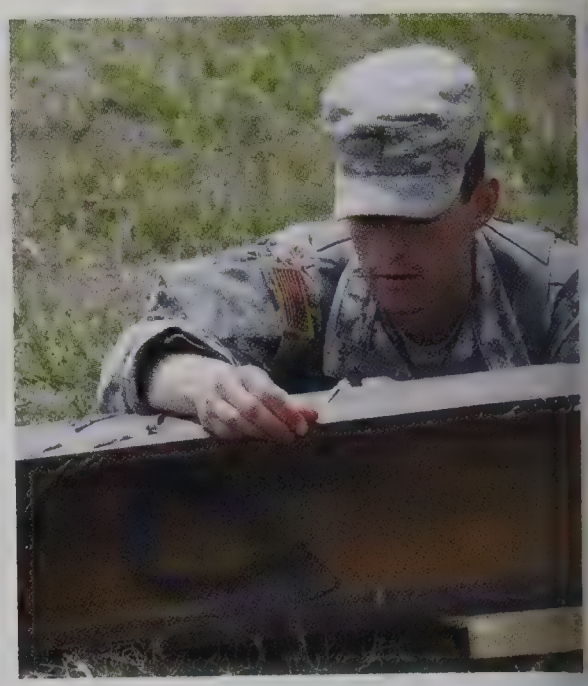


A team loads a mock casualty aboard a Chinook helicopter during the casualty evacuation portion of the competition.

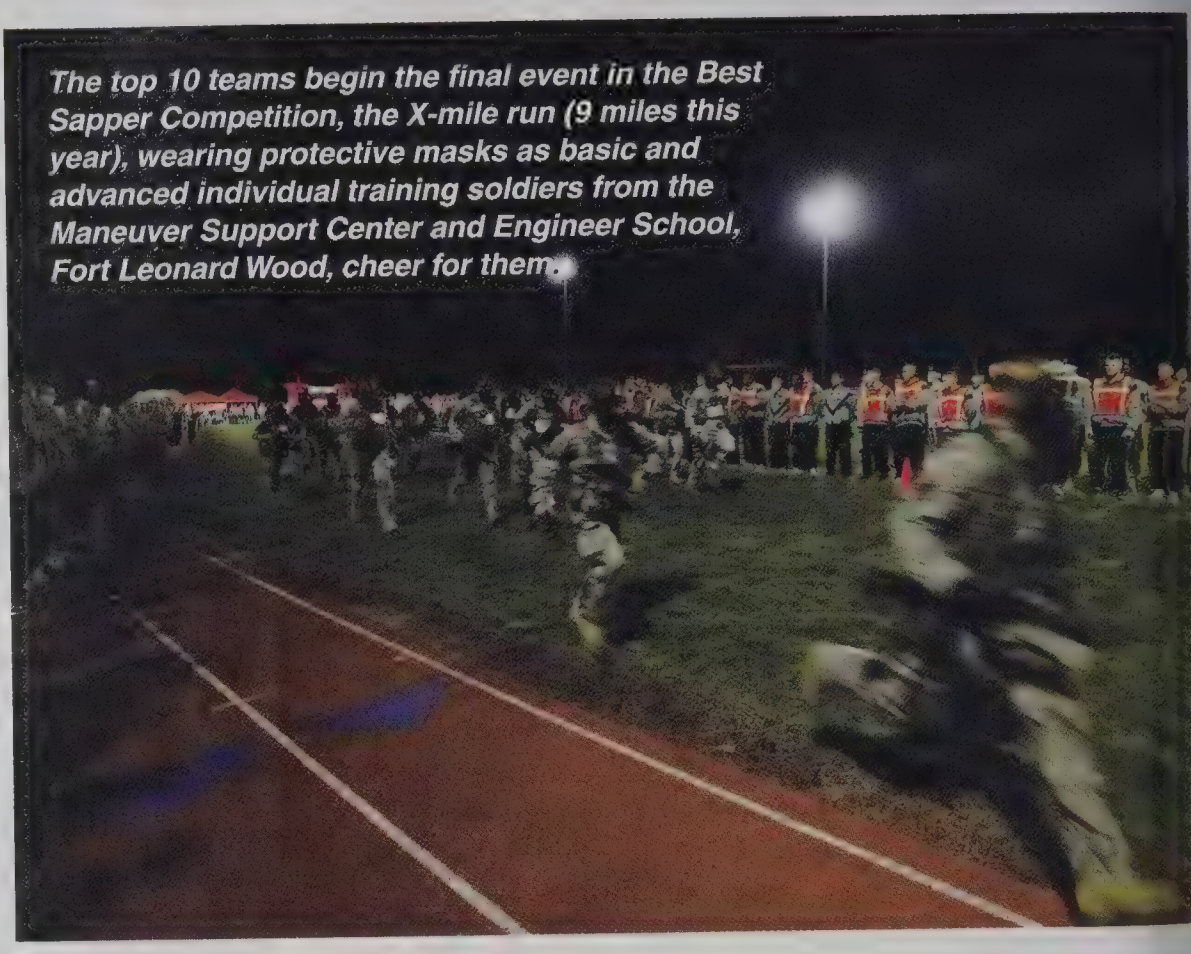








Top left, representing the U.S. Military Academy, West Point, N.Y., CDT Dominic Senteno swings a grappling hook for a distance throw while his teammate, CDT Jonathan Kralick, observes. Center, a team performs calculations for a demolition event. Right, 2LT William Toft, from the 72nd Engineer Company, 1st Engineer Battalion, Fort Riley, measures an I-beam on the steel-cutting lane.



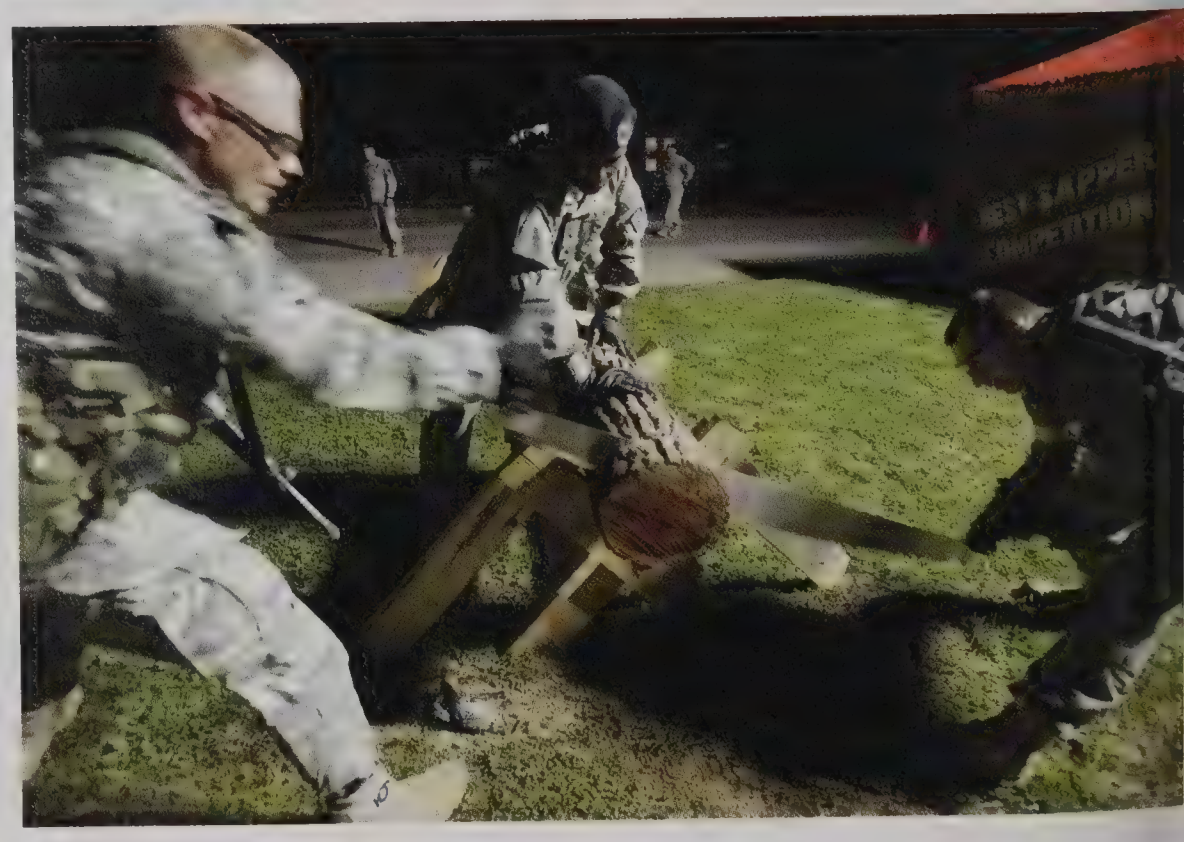
The top 10 teams begin the final event in the Best Sapper Competition, the X-mile run (9 miles this year), wearing protective masks as basic and advanced individual training soldiers from the Maneuver Support Center and Engineer School, Fort Leonard Wood, cheer for them.

time with another partner, and placing second with 1LT Hogan last year.

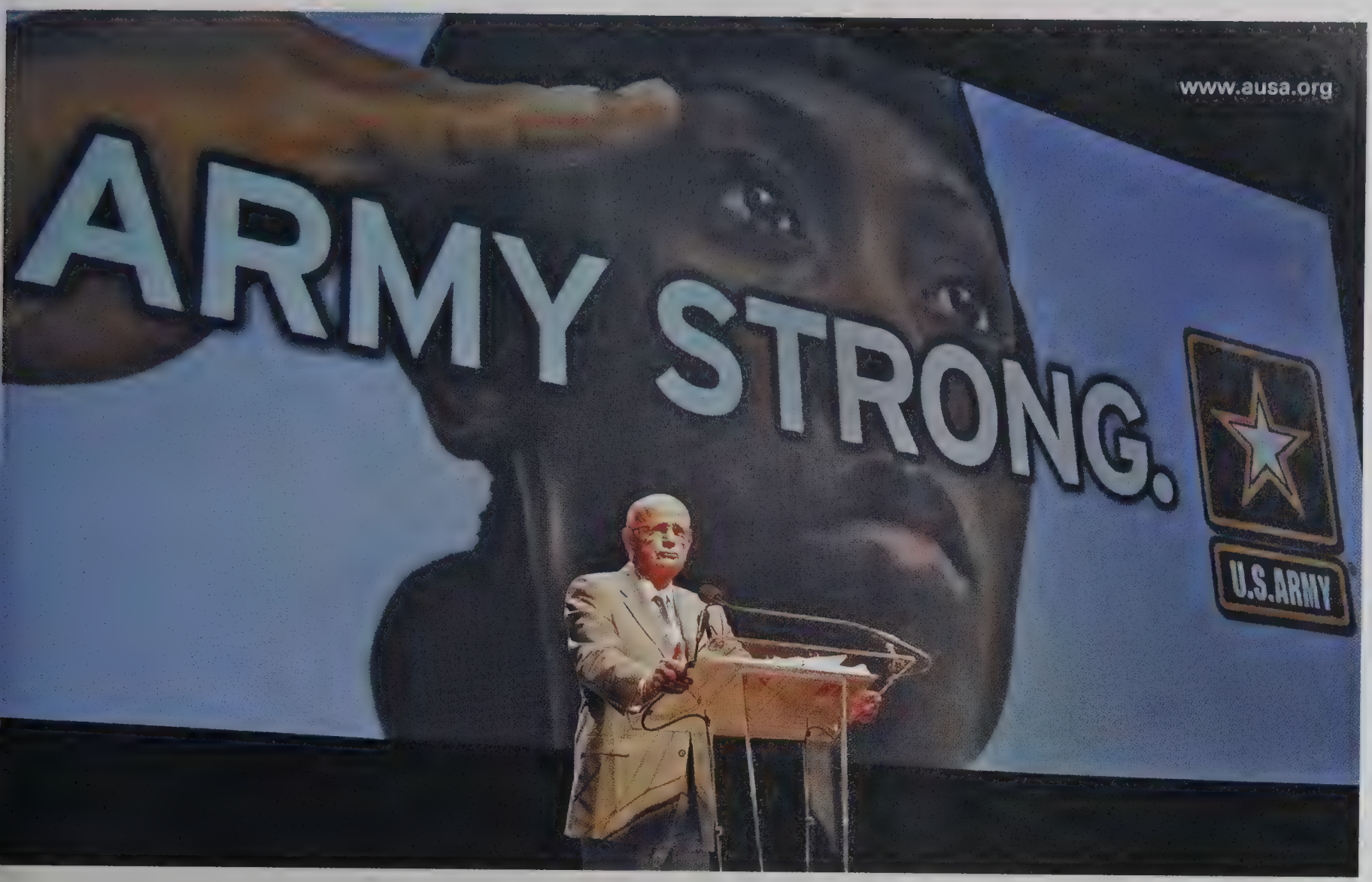
"Placing second left a bad taste in my mouth," MSG Behkendorf said, "and I had to try again."

Both men said it was their last chance to try for the title as a team; both were weeks away from deploying to Iraq at the time of the competition. (They likely will be deployed by the time this issue prints.) MSG Behkendorf also was leaning on the rhetorical crutch of advancing age—the time-honored "getting-too-old" excuse from a man who probably can pitch an anvil for distance and road-march until next Christmas … maybe dragging that anvil.

MSG Behkendorf said they had planned to tweak some finer points of strategy, based on last year's experience. "During the rucksack march, we thought we'd just hang with the team setting the pace, then pass them and see how they reacted. Last year, we passed them, and those guys passed us back. This year, we just ran a little faster."



A team saws through a log during the X-mile run.



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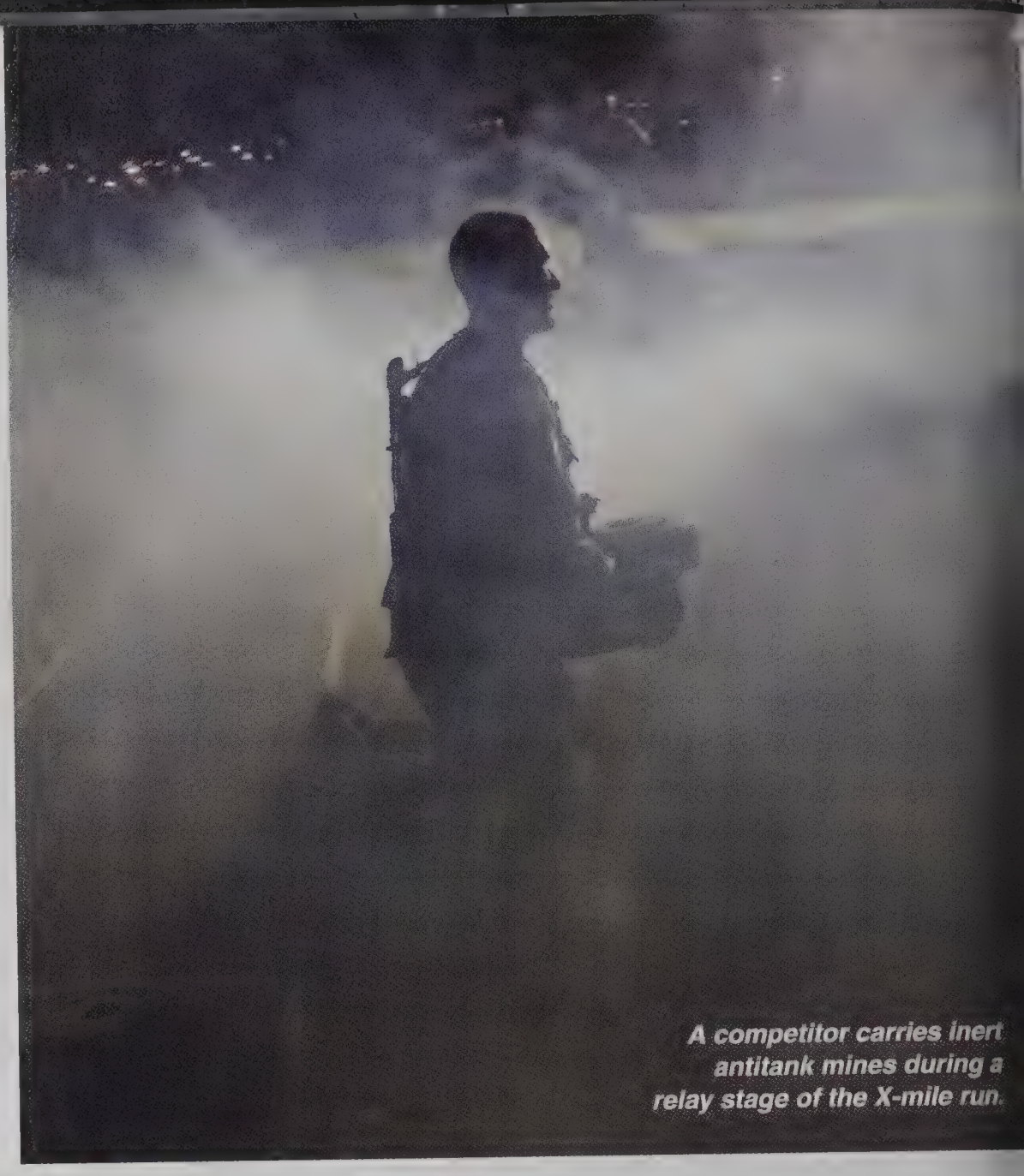
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"The toughest part was on day one, the helocast/poncho raft swim," he continued. "I'm not an Olympic swimmer, and it was pretty tough."

The final X-Mile Run was difficult, said 1LT Hogan. "By that time, it's just hard to keep moving."

The lieutenant said that competing is a reward in itself. "It's good to be around all the best and the brightest," he said. "It's a chance to see how our peers are doing and what they are doing. We can just sit down and talk. It's a competition, but everybody tries to help each other."

CPT Douglas Solan, Sapper Leader Course company commander and self-described chief execution coordinator for the 2009 Best Sapper Competition, said the event "has grown in popularity and respect … to be the premier event for the Engineer Regiment. Next year, it will be at least as large [in terms of the number of teams], if not twice as large, and it will be the 25th anniversary of the Sapper Leader Course—a significant milestone for a course that was



A competitor carries inert antitank mines during a relay stage of the X-mile run.



A soldier slams a bar into a doorframe during the final event of the X-mile run.



The X-mile run winners—who also won the competition—cross the finish line in 80 minutes.



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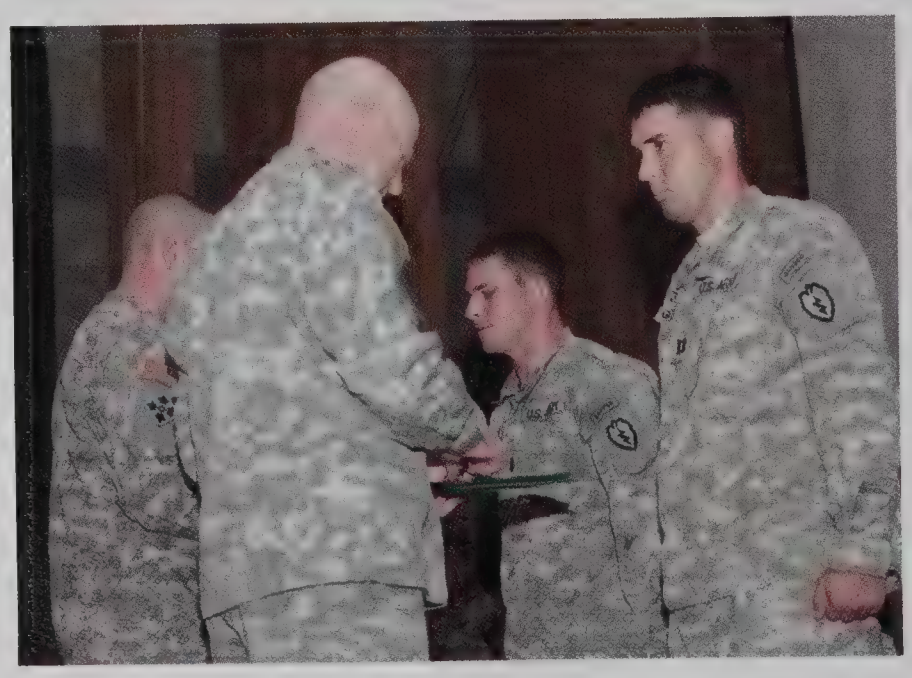


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The 2009 winning team: 1LT Shawn Hogan and MSG Michael Behkendorf from the 7th Engineer Battalion, 20th Engineer Brigade, Fort Drum, N.Y., hold aloft the Best Sapper Competition Trophy.





Above left, the second-place team, CPT Mark Gillman and SSG Gordon Paulson, representing the 66th Engineer Company, 25th Infantry Division, Schofield Barracks, Hawaii, and above right, the third-place team, CDT Kralick and CDT Senteno, representing the U.S. Military Academy, receive honors from COL Bryan Watson, commandant of the U.S. Army Engineer School, and CSM Robert Wells, the school's command sergeant major.

originally supposed to be around for a few months. Its original purpose was to bring in company leadership and train them on nonstandard engineer tasks above the level they were getting to better serve our infantry counterparts."

The need for nonstandard engineer skills didn't disappear, and neither did the Sapper Leader Course, open now to the range of NCO ranks and students from outside the Engineer branch, and to sister services and foreign allies. Last year, the course awarded the Sapper tab—authorized by the Army for graduates about four years ago—to 433 personnel.

Observing the Best Sapper events, MG Gregg F. Martin, commanding general of the U.S. Army Maneuver Suppo Center and Fort Leonard Wood, said, "These skills are cri cal for full spectrum operations."

"We are trying to run a world-class event, and at t same time keep it relevant to what they are being expos to downrange," said MSG James Watnes, chief instruct for the Sapper Leader Course.

COL Bryan Watson, commandant of the U.S. Army Eng neer School, said at the Best Sapper Competition awa ceremony, "The reason we have sappers is because t force needs them … The sapper says to the infantry and the Army, 'I will lead the way,' and when you are in pinch, you will follow them."

The Western Hemisphere Institute For Security Cooperation Provides International Training

By LTC Lee A. Rials
U.S. Army retired

When President Bill Clinton signed the law creating the Western Hemisphere Institute for Security Cooperation (WHINSEC) in late 2000, he set into op-ation a Department of Defense organi-ion that serves the United States by oviding a variety of professional litary and law-enforcement courses students throughout the Western misphere. Operated and main-ned by the Army at Fort Benning, ., WHINSEC contributes to coopera-n among the nations of the Organiza-n of American States, enhancing the ilities and reliability of the security forces pporting democratic governments.

WHINSEC's diversity begins with its U.S. faculty, ich includes uniformed men and women of the U.S. my, the U.S. Air Force and the U.S. Marine Corps serv-g alongside U.S. civilian instructors, including a State partment foreign service officer. Although the Army ovides the greatest number of personnel, other services and agencies provide instructors for some parts of some courses. The Department of Justice and the Drug Enforcement Administration provide experts to teach portions of the counterdrug and counter-narco-terrorism courses. Most courses also invite guest lecturers to give even more depth to learning.

Essential to WHINSEC's ability to teach up to 1,400 students a year are the invited guest instructors from partner nations. These 35 to 55 men and women enable WHINSEC to provide high-quality instruction in a variety of courses. Instructors can range from college professors to police officers from several nations and members of all military services. The Institute currently has no U.S. naval officers on the faculty, but does have two naval commanders, one from Peru and one from the Dominican Republic.

Each student in every course at WHINSEC begins with at least one day's instruction on democracy and human rights issues. All resident courses continue that initial coursework, which varies according to the length of the course. The focus of these classes is on democracy and the armed forces, and then on the five issues mandated by law: the rule of law, due process, human rights, the role of the military in a dem-



WHINSEC

LTC Willington Zambrano of the Panamanian police teaches a class at the Western Hemisphere Institute for Security Cooperation (WHINSEC), which is operated and maintained by the Army at Fort Benning, Ga.



Students in WHINSEC's tactical courses learn water survival skills; the Institute offers a variety of courses that train and educate professional security officers from nations throughout the Western Hemisphere.

ocratic society and respect for civilian authority. Add in an ethics class and the application of these principles, and about 10 percent of every course is devoted to democracy and human rights.

The Command and General Staff Officer Course offered at WHINSEC is essentially the same as that offered at Fort Leavenworth, Kan., with some additional opportunities not available to those attending the Kansas course. The Institute course begins with an entire week devoted to democracy and human rights issues. Seminars from subject matter experts—such as a delegate from the International Committee of the Red Cross—and a day trip to the Civil War prisoner-of-war camp at Andersonville National Historic Site, Ga., help make this a meaningful experience.

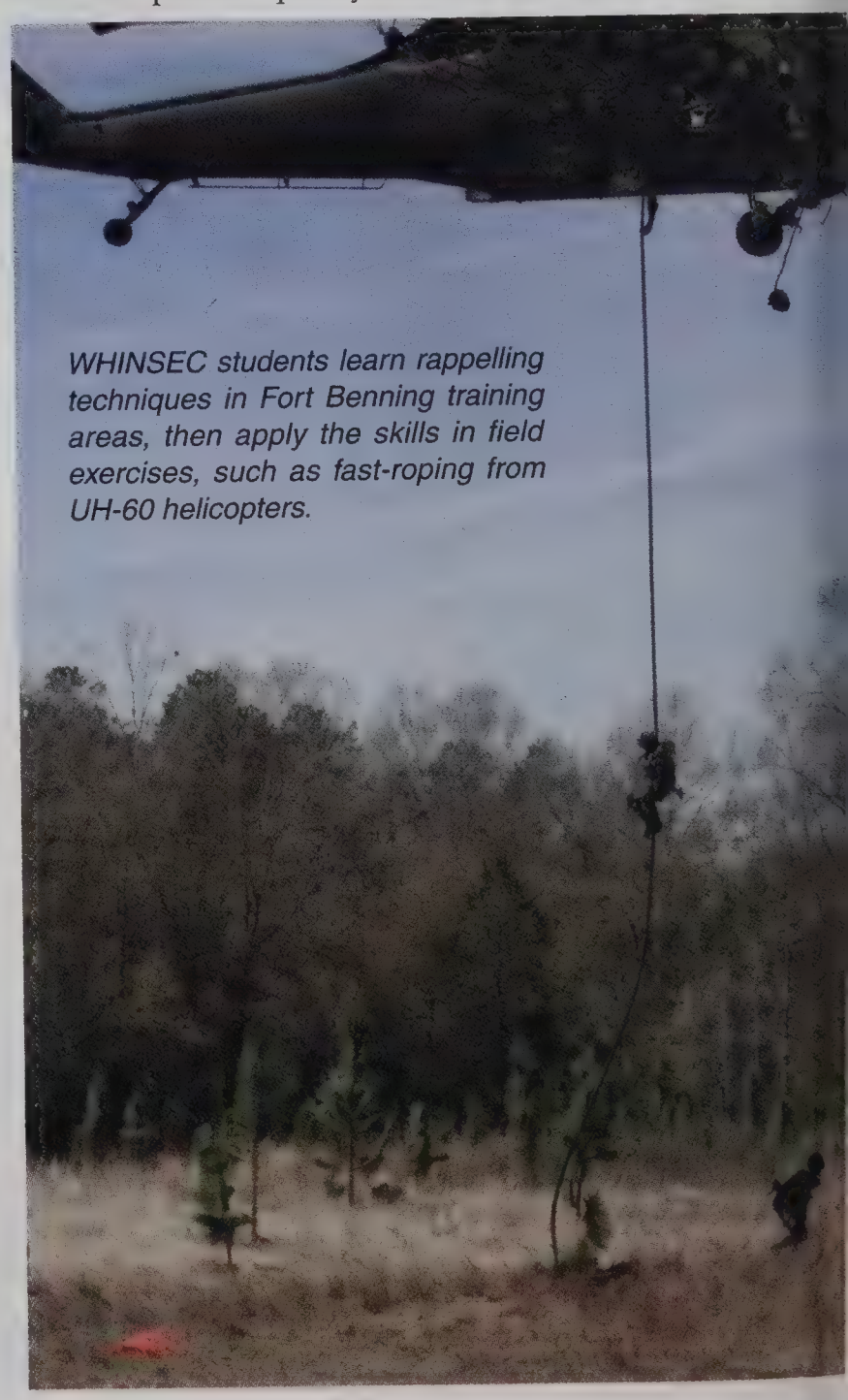
American students at WHINSEC join their international classmates on DoD field studies trips to Washington, D.C., and Atlanta, where they interact with government officials and members of pertinent nongovernmental organizations. In May 2008, 52 officers—36 of them members of the U.S. military, one Canadian and 15 from Latin American countries—completed this year-long course and moved on to new assignments.

Other courses offered at WHINSEC address the challenges that the United States and its partner nations face every day, challenges such as illegal trafficking of all sorts, natural and manmade disasters, and global requirements for peacekeepers.

The Institute offers a Joint Operations Course for lieutenant colonels and colonels and their equivalents from other services. Joint operations instruction also includes interagency operations because, in the 21st century, most military operations also require attention to civilian issues.

The Captains' Career Course, based on the U.S. Army Infantry School's course of the same name, shares U.S. Army doctrine on commanding companies and serving on battal-

ion and brigade staffs. An Instructor Course (required of al personnel teaching in Training and Doctrine Command or ganizations) prepares officers and NCOs to take the plat form and present quality instruction.



WHINSEC students learn rappelling techniques in Fort Benning training areas, then apply the skills in field exercises, such as fast-roping from UH-60 helicopters.

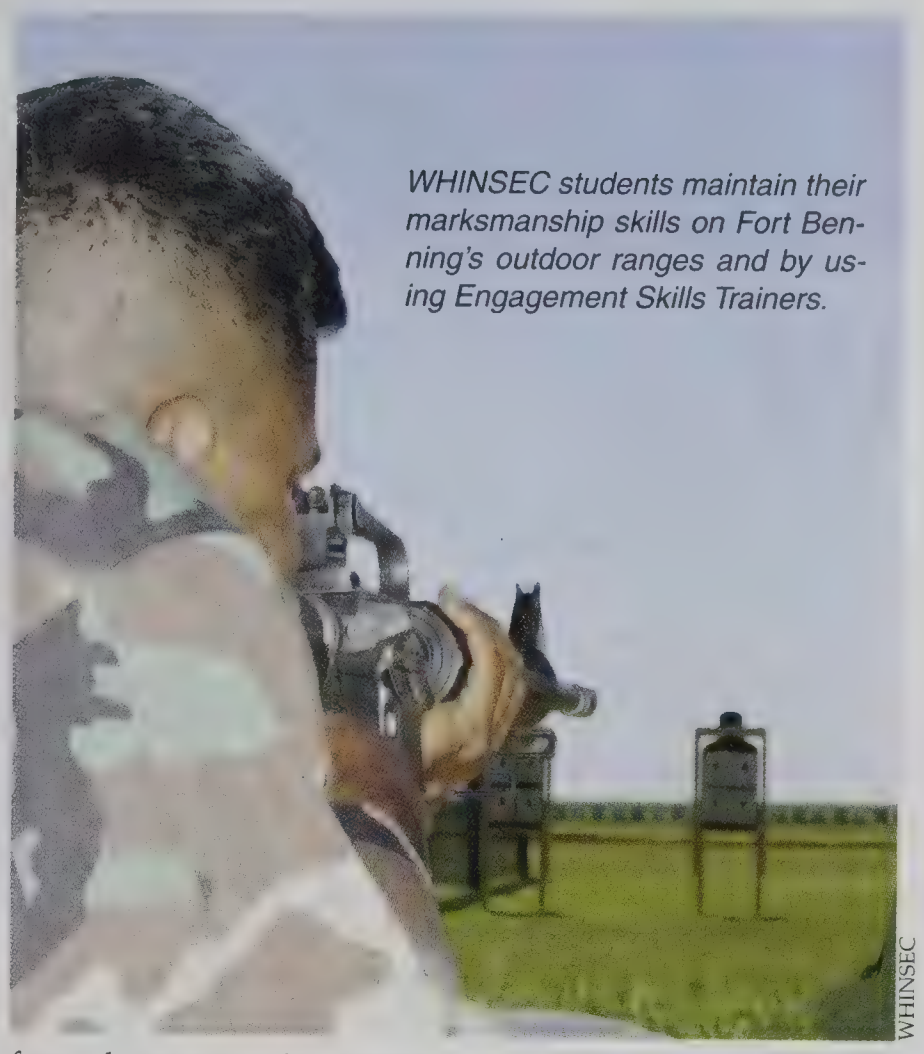
***LTC Lee A. Rials**, USA Ret., served more than 21 years in the Army. His military education includes the Infantry Officer Advanced Course and the Command and General Staff Officer Course. He was a public affairs officer for the 194th Armored Brigade and for the Army's Southern European Task Force from 1989–1992, and is now the PAO for WHINSEC.*

n this Year of the NCO, the Roy Benavidez NCO Academy continues to develop the NCO corps of our partner nations. The NCO Academy team teaches three sessions of an NCO professional development course in Spanish nd one session in English each year. The seven-week ourse addresses those skills needed to lead squads and atoons and to serve as company first sergeants. At the re-uest of partner nations, the NCO Academy recently began fering a Squad Leader Course.

The Tactics and Special Operations instructors offer four fferent cadet leader courses: an Engineer Operations ourse, a Medical Assistance Course, a Counterdrug Oper-ions Course and a Counter-narco-terrorism Information nalyst Course. This is team-teaching at its best, with U.S. d international officers and NCOs with expertise in these bjects teaching professionals how to do their jobs better.

When the Civil Military Operations Course is in session, e city of Columbus, Ga., includes WHINSEC students in disaster-relief exercise. Students play roles alongside lo-l and state public safety officials and representatives om nongovernmental organizations who participate in ose missions. Of all WHINSEC courses, this is the one at helps first responders (most often from the military) to ve lives and achieve order in the wake of disasters such hurricanes, earthquakes and floods. Beyond practicing e immediate tasks of first responders, students learn how work with the other governmental and nongovernmen-agencies that help put people back on their feet follow-g a crisis.

The Peace Operations Course teaches leaders to partici-te effectively in United Nations peacekeeping efforts. out 6,500 of the 7,000 United Nations peacekeepers om Western Hemisphere nations serving at any given ne are from countries other than the United States and nada. The Institute has an agreement with the U.N. for a tributed learning component. When students graduate from the course, they receive a WHINSEC diploma and a United Nations Peacekeeper Certificate.



WHINSEC

WHINSEC students maintain their marksmanship skills on Fort Benning's outdoor ranges and by using Engagement Skills Trainers.

A Departmental Resource Management and Logistics Course offers civilian and military personnel from defense and security ministries the tools to manage their budgets; plan for maintenance and supplies; and make sound decisions regarding the acquisition of equipment, supplies and training.

The Information Operations Course helps students interact with the citizens of their democracies. This is essential in democratic societies in which both military and police operations are often carried out in populated areas. The Human Rights Instructor Course develops leaders who can return to their own organizations and teach the operational necessity of respecting human rights.

In July or August, when a Cadet Leader Course is in session, ROTC, United States Military Academy and United States Air Force Academy cadets will participate in an immersion program that supports Secretary of Defense Robert M. Gates' initiative for military officers to be multilingual and culturally aware. The cadets will go on to Airborne School to complete Cadet Tactical Leader Training.



WHINSEC Medical Assistance Course students evacuate an ambulatory and a litter patient. Students learn to perform all the duties of an emergency room technician according to U.S. treatment standards.

NCO students from Peru and Mexico participate in a field exercise at Fort Benning. WHINSEC students must master U.S. Army equipment as well as learn U.S. Army doctrine.



WHINSEC courses have contributed directly to the ability of hemispheric military, police and civilian organizations to respond to hemispheric threats. The Institute proves its value by providing training and education to help professional security officials meet challenges more effectively and with dedication to the values of democracy and human rights. The Institute provides a venue for developing relationships, encouraging hemispheric trust and partnership, and strengthening interoperability among hemispheric security forces.

The attitude of openness and transparency at WHINSEC extends to everyone. Members of the public are welcome to visit classes, talk with students and faculty, and review instructional materials. ★



WHINSEC



Left, students practice crossing a two-rope bridge they constructed; several WHINSEC courses incorporate bridging techniques. Right, MAJ Timothy Hudson, chief of the Tactics and Special Operations Department, congratulates Medical Assistance Course instructor SFC Jimmy E. Harrison as he receives his diploma for completing the Instructor Training Course, a prerequisite for all who teach at WHINSEC.

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Supporting a Combat Veteran's Family

Taking care of Soldiers and their families doesn't end at redeployment. It is what we do as Army leaders. While we always take care of the Soldiers entrusted to our immediate leadership, we occasionally have the opportunity to make a difference for Soldiers assigned elsewhere. This month, we offer a glimpse into an inspiring story of an Army mom who reached out for advice as she prepared to welcome home her son, a combat veteran. CC members (and even a commander's wife) responded generously to her request, sharing their own experiences and advice about helping a loved one deal with post-traumatic stress disorder (PTSD). In the following excerpts of e-mail traffic between this mom and CC members, we see leaders rallying to support an Army family.

E-mail from an Army Mom

felt compelled to write to you be-
use I am at a loss as to where to turn
guidance as we face the homecom-
of our son.

My son did a tour in Iraq for 15
nths. He was the driver for the
mvees and APCs that patrolled his
t's area of operations. On two sepa-
e occasions, his life was miracu-
sly spared, and I don't use *miracle*
ntly. On the first occasion, he was
led off the "roster" as the driver for
patrol just 30 minutes before it
nt out. The patrol hit an IED that ut-
ly destroyed the truck, killing the
ver and two others. The second oc-
sion was a few months later, when
came home on mid-deployment
ve. He had requested a departure
e in mid-April, and he was sent
me on the 10th. When he returned
Iraq, he learned that his platoon had hit an IED, killing
vehicle's driver—on the 12th.

Douglas' contract ends in two months. Last month, he
s told he was going to be stop-lossed for a tour in
hanistan. Just three days ago, however, we learned that
will be discharged in two weeks. We are almost numb
n thanksgiving for God's continued grace and mercy!

am concerned about him, though. When Douglas has
en home on leave, we have seen changes in him—he's "cold"; he's filled with hate for the Iraqis. If we drive too close to other cars or pass stopped cars on the road, he is visibly shaken. He has survivor guilt.

How can we help him adjust? How can we help him ease back into civilian life? *Can* we help him? Where can we go to get wise counsel about these things? I don't even know if I'm on the right track or asking the right questions, but my instincts tell me that these next few months are critical in helping him on the path to a healthy future. Please know that any guidance—web sites, books, etc.—you can recommend will be extremely appreciated.



Family photo

Judy's concern for her son inspired other Soldiers to share their own experiences of adjusting to life after combat.

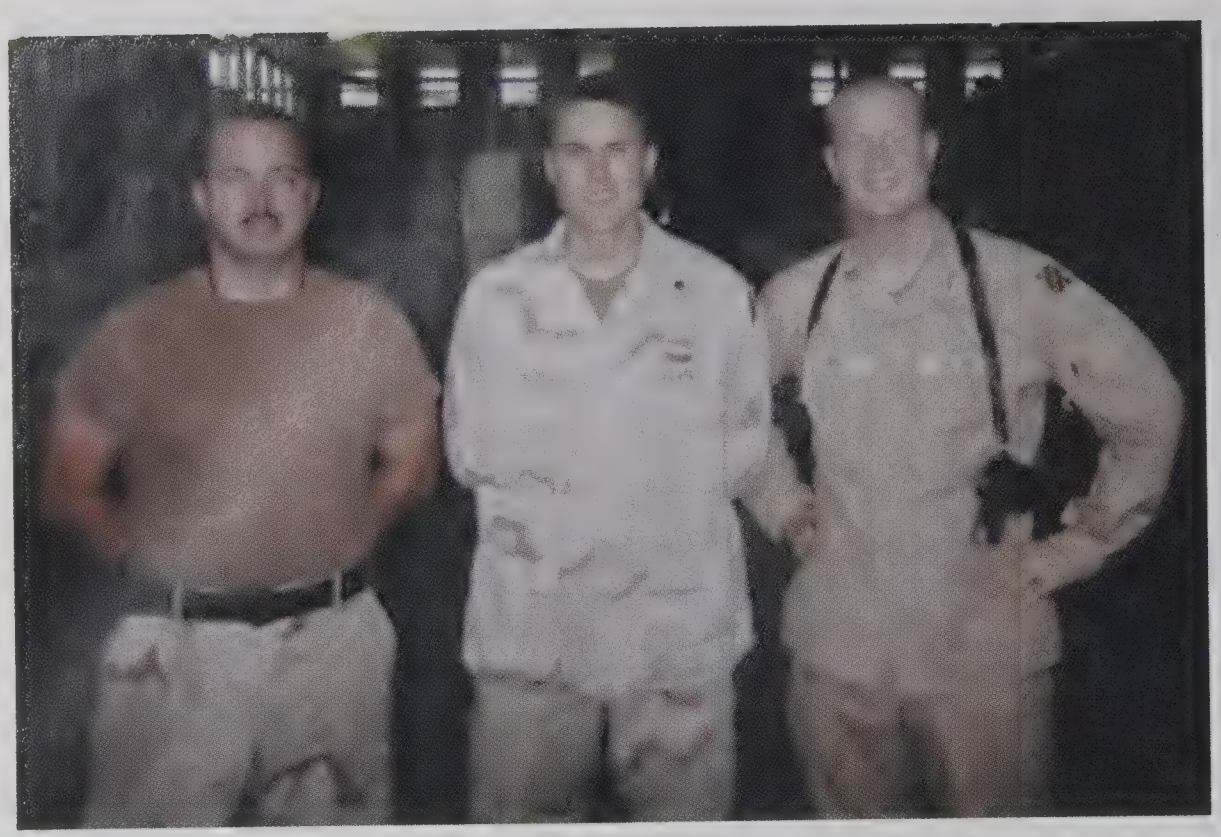
Pete Kilner's Immediate Response

Judy: Thank you for writing, and thank you for raising a child who selflessly serves our great country. I commend you for proactively preparing to help your son. I don't have personal experience with the questions you ask, so I am writing some of my fellow Soldiers who do, asking their advice.

Response from Ray Kimball

Past Commander, F/3-7 CAV, 3 ID

Judy: Although I would never dream of trying to explain your own son to you, I can certainly identify with where he's been. So I'm going to tell you a little bit of my own journey in



From left to right, 1SG David Spurlin, SPC John Pazterko and CPT Ray Kimball during their unit's deployment to Iraq. CPT Kimball believes that "talking with other vets is so important" to readjusting to life after combat.

the hope that it might help give you some insights. If you think it will help, feel free to share it with him as well, and if he'd like to contact me and talk more, that's totally fine.

I deployed to Kuwait in January 2003 in command of an aviation maintenance troop—90 soldiers responsible for fueling, fixing and arming the reconnaissance helicopters of the 3rd Infantry Division. We crossed into Iraq as part of the lead echelons of the invasion on March 20 and spent the next 20 days punching through ambushes in unarmored vehicles and dodging sandstorms on the way to Baghdad. Through God's mercy, we didn't lose a single soldier. Because we were still under "peacetime" personnel rules and I had been in command for 24 months at that time, I gave up command of my troop in June 2003 and came home alone.

I figured I was in good shape—I had read all the literature on PTSD and had done my obligatory sit-down with a combat-stress counselor. So I immediately jumped into the swing of things back at home, which included an 8-month-old baby. And everything was going great—until a week later, when I nearly rammed a cop car in a speed trap on the side of the road because I thought he was setting an ambush. I drove home with a bad case of the shakes, barely able to keep the car on the road. I spent the next hour curled up in a ball on my couch, resolutely refusing to believe what had happened to me. I refused to be "one of those guys." I was not going to be the bad stereotype of the returning vet who jumps at every truck backfire.

I went to a counselor the next day, who gave me the usual song and dance—you're in control, it's not as bad as you think, etc. The last thing I wanted to do was hear more of that, so I smiled, told him I would look up a counselor at my next duty station and walked away as quickly as I could. I spent the next two years in grad school, prepping for my next assignment as a history teacher at West Point. That meant that, professionally, I could largely keep to myself. I didn't have to admit that when I went into a classroom, I immediately went to the seat that allowed me to see all of the windows and the door. I didn't have to admit that crowds freaked me out until I could find an empty wall to set my back against. And I didn't have to tell anyone, least of all my wife, that sometimes I ran drills at night where I practiced how quickly I could get my hand gun out of the locked case she insisted I keep it in, get it loaded and take up a firing position. I told myself that I had things under control, that I was just on edge because friends were in combat and dying while I was in a safe assignment.

We arrived at West Point in June 2005, and almost immediately I started going downhill. I became irritable at nothing, short-tempered when things didn't go the way I planned and generally a pain in the ass to everyone I loved. The tipping point for me was when I nearly hit my now-3-year-old child because he wasn't getting dressed quickly enough. The shock of that was enough to force me to come to terms with the fact that what I was doing was not normal. Fortunately, I was able to find a counselor at West Point who had just finished a tour in Iraq with the 4th Infantry Division. No platitudes from him—just listening and understanding. With his help, I came to understand my triggers—the things that set me off—and what mechanisms I could use to cope.

Additional Advice from Ray Kimball

1. Get him talking with someone who understands. Best would be another Iraq war veteran, but any combat vet will likely have enough shared context that your son will talk with him about things he won't talk about with his family. What's most important is that he talks and that he doesn't keep his experiences bottled up.

2. He will most likely not talk with you about *his own* experiences, at least for a long time. But he may be willing to talk about *his buddies* with you. So ask him about his gunner, his team leader or squad leader. This approach is more likely to get some conversation going between you and him about the war.

3. If he is willing (and he probably won't be at first), he can see a counselor for free through Army OneSource. It is confidential, and the first several sessions are covered by the government free of charge.

I've finally come to terms with the fact that I'm a different rson from the one who went to combat. Not better, not rse—just different. I can't relate to the world the way I did fore. I see things through a different set of lenses, and ngs that used to be all-important to me before now seem iculously trivial. It's difficult explaining that to someone who sn't been there, which is why talking with other vets is so portant. I also shied away from telling my own story, mainly cause I got tired of people calling me a hero without even owing what I'd done. I served with some heroes, but I'm t one of them. Mostly, I got tired of the inane questions.

"Did you kill anyone?" Yes. Do you really want to know w?

"What's combat really like?" Gee, will you let me lock you your car for a week and shoot holes in it so I can show u?

"Did you think there were WMDs?" No, jackass, I just re a chem suit in 100-degree heat for a month because I nted to slim down a little.

Nobody wanted to know about the superb men and men I'd led. Nobody wanted to hear about the specialist o gritted out a sandstorm hunched under a poncho and shed a complex repair task because he knew that air- ft had to be in the air as soon as the weather settled wn. Nobody wanted to know about the sergeant who led a three-man team shoveling rockets, ammo and fuel for 24 hours straight because the rest of us were still fighting through massive traffic jams and moon-dust sand. To a great extent, it seemed like everyone I met was doing their damnedest to avoid confronting the fact that men and women were fighting and dying overseas in the first place. So I just didn't talk about myself at all.

One final thing—I understand survivor's guilt. I've lost two classmates and three former copilots so far. Every time I think of them, I wonder why them and not me. Every time. I can work through all the rationalizations, spell out all the reasons why it's completely illogical to think that way—doesn't matter. I have to believe that I'm still around for some good reason, and not just a quirk of fate. Your son sounds like an amazing young man. I hope he can do the same.

Response from Ryan Neely

Future Commander; Past Platoon Leader in 2 BSTB, 2 ID

Judy: My name is Ryan Neely. My similarities with Douglas are ironic. I am a Soldier who just came back from 15 months in Iraq around Christmas of last year. I, too, was an "IED hunter." I assume he is an Engineer Soldier as I am, but maybe not. I saw his unit many times; we were not too far apart in Iraq. Your stories of Douglas' miracles reminded me of my proximity to death. I was in a vehicle hit by an IED, and my platoon paid a heavy toll throughout the deployment. I share this only to liken myself to your son and to the tough readjustment phase that he and I continue to go through.

My differences with Douglas also need to be addressed. I want to be honest and share the limitations of my ability to understand and advise you on what your son is going through. I do not have lasting effects such as hypervigilance, anxiety attacks or a deep hatred for Iraqis. I don't think I have survivor's guilt. I certainly can't diagnose Douglas' state, but he seems to exhibit more of the signs of lasting combat stress, as I understand them. If Douglas has PTSD that affects his daily life, I have no right or ability to offer advice other than that he needs professional help, which is



1LT Ryan Neely reenlists PFC Matthew Dennison at FOB Loyalty, East Baghdad. "To heal," says 1LT Neely, a combat veteran "has to go where he doesn't want to go—into the depths of his pain and anguish."

Resources Suggested by Ryan Neely

Books:

Cantrell, Bridget and Chuck Dean, *Down Range: To Iraq and Back* (Seattle, Wash.: WordSmith Books, 2005)

Grossman, Dave and Loren W. Christensen, *On Combat: The Psychology and Physiology of Deadly Conflict in War and in Peace* (Boston: Back Bay Books, 1995)

Grossman, Dave, *On Killing: The Psychological Cost of Learning to Kill in War and Society* (Boston: Back Bay Books, 2009)

Matsakis, Aphrodite, *Back from the Front: Combat Trauma, Love, and the Family* (Baltimore: Sidran Institute Press, 2007)

Web sites:

http://iava.org/content/resource-oefoif-vets

http://woundedwarriorproject.org/

becoming more available to vets. What follows are my experiences and some observations. I pray they are insightful and beneficial to you.

When I came home, I was emotionally numb. I was impatient and quick to anger. I held resentment and animosity toward the general public for not being willing to serve or sacrifice, as well as for not being able to understand what happened to me and other Soldiers in combat. I may have seemed fine to friends and outsiders, but my wife felt that I was withdrawing from her. I wasn't sharing or opening up. I tended to be extremely passive about everything—nothing was important enough to get a rise out of me, to get me excited, except when I got angry. I attribute this emotional numbness and coldness to the fact that, for over a year, I'd had to suppress my emotions. Excitement, anxiety, nervousness … all emotions had to be dampened in order to maintain a calm demeanor in the toughest of situations.

Don't be discouraged, but I think the first step is to realize the limits of your ability to heal him. It's not always so, but combat veterans tend to see anyone who is not a combat veteran as uninformed, naive and just inexperienced. Douglas may not fall into this, but combat becomes an exclusive club of sorts. Therapeutic moments typically come in the company of this exclusive club. The more he has in common with another Soldier, the more therapeutic the time can be. He has to find some outlet where he feels understood. This will come mostly from fellow combat veterans in a group setting at the VA, the VFW, etc. He may want nothing to do with any of these groups or anything too "military" for some time, but I think this only isolates him more and could prolong suffering and pain. To heal, he has to go where he doesn't want to go—into the depths of his pain and anguish. No one can coerce, plead or will him into this. In fact, the harder people push, the harder he may push back. He has to feel safe to share, but that won't happen in an environment or relationship he deems as threatening or pressured. Find a balance—you may think you know what he needs, but if he doesn't think so, telling him may only alienate him.

Here are some practical steps that you can try, based on my experience:

■ Overwhelm him with praise and pride about his service. This can't be a bad start; at least for me, it wouldn't have been. Don't let the complexity of his situation keep you from saying something; just make it positive and supportive. He may surprise people who haven't been around him in a while: neighbors, extended family, church members, etc. All of them need to praise him. Don't pity him, don't try to understand him. Just accept him as a servant of our country who is paying the emotional and mental costs of war.

■ Treat him like a man. If any experience makes us one or so we want to think, it is seeing and experiencing death in armed combat. My mother wanted to keep me in the box she felt comfortable with—her innocent boy, clean cut and no rough edges—but that wasn't me anymore. I felt belittled and misunderstood and underappreciated for the sacrifices I had made.

■ To sustain healing over the long term, I went on a marriage retreat with my brigade. The approach was that to heal a marriage, one must first heal the wounds of combat. There were about 100 couples there, three months after returning home. We were asked to share our most troubling combat memories with those at our table and with our spouse. One of my friends got about 10 seconds into his memory and lost it; I cried like a baby, too. I knew what he was going through because we had shared that experience. After that, I lost all sense of pride, and that guy and I hugged for about five minutes while he kept on crying uncontrollably. I will never forget that moment. I still tear up thinking about it.

For me, the fellowship of other vets is paramount to healing, is vital for my identity and gives me pride. The first step is sharing, which is a catalyst for being able to process and make sense of our experiences. This may take years, but if we try to understand everything first, sharing may be stifled, and thus our healing will be stifled.

I hope this was of some help, and I would love to continue a dialogue with you, or especially Douglas. God bless you.

Response from Joe Geraci

Past Commander, A/1-508 PIR, 173rd ABN BDE

Judy: My heart goes out to your family, as well as my prayers for your son. As I can somewhat understand—from hearing about the experience of my mother and father during my two deployments—it is extremely hard for the parents of deployed Soldiers. You support your children and are proud of their service, but at the same time you are concerned about their well-being. The resulting range of emotions can be quite draining on a parent.

I don't know if this will help, but know that everything you describe is extremely normal and that there are tens of thousands of mothers out there with your same concer-



After his last deployment to Afghanistan, MAJ Joseph Geraci is now stationed at West Point, where he teaches counseling and psychology and works as a psychotherapist for veterans.

u are not alone. In addition, there are tens of thousands servicemembers facing the same challenges as your . Being completely honest with you, combat changes only a Soldier but all those who are close to a Soldier. diers are presented with life-altering situations that 99 cent of society will not be asked to experience, so it is y natural for Soldiers to change through their experi-es. Some of this change can be of concern, as you ntion in your e-mail (being cold, filled with hate and visi- shaken, feeling guilty and depressed), yet with time and eptance of the change, a Soldier can also access the itive aspects of being through combat—increased self-th, increased compassion and care for others, in-ased feelings of contentment and service.

he critical part is experiencing and working through the cerning aspects in order to access the more positive ects. Some Soldiers can work through the concerning ects by themselves or with close friends. Others, like self, were able to work through them in counseling. One ortant thing that must be present is the Soldier's willing-s to work through the concerning stuff. As hard as it / be for those who love their Soldiers and want their diers to return to the way they were before, it must be he Soldier's timeline—when he or she is ready.

ly biggest recommendation for you would be to con-e to love your son, as it sounds like you have, but also jive him the space to work through what he needs to k through. Be supportive and let him know that you are e for him, but do not pressure him. It is critical that he someone to talk to, but this has to be of his choosing; has to feel supported and that the listener will completely accept him in a nonjudgmental way. There are counseling services available to him through the Army, but I imagine that he will not take the Army up on the offer. Another asset available to him is the Department of Veterans Affairs. The VA runs hundreds of Vet Centers throughout the nation that offer readjustment counseling. They offer free services for servicemembers and their immediate family members. The web site for the Vet Centers is www.vetcenter.va.gov. Most of the counselors at the centers are veterans themselves and are committed to helping Soldiers readjust to civilian life without the paper trail of documentation. I spent six months going weekly to a Vet Center after my last deployment, and I know that it greatly benefited me and my family.

Well, I hope that this helps. Let me know if you have any other questions. Take care of yourself, and stay strong.

Response from Molly Kranc, Wife of Ryan Kranc

Past Commander of Quickstrike Troop, 4/3 ACR

Judy: I am the wife of an Iraq veteran, and I am moved by your family's predicament. My husband shared your e-mail with me because he knew I can relate to your questions and to the situation you are facing.

When my husband Ryan came home from combat, I tried very hard not to have any expectations and just to accept the reality of what he'd gone through and the person he had become. We sought counseling individually and jointly, which did help, but I really was hoping that the counseling would "fix" my Soldier so our lives could go back to "normal." There is a feeling of loss and grieving as the experience changes your life in a way that is irreversible. My



Family photo

CPT Ryan Kranc and his wife, Molly, recognized the value of counseling after he returned from his combat deployments. "My own process has been a long one," says Molly, "and I think it helps to take the long view."

own process has been a long one, and I think it helps to remember to take the long view. Patience is so important, as life with your Soldier can be exhausting and exasperating.

I have come to the conclusion that PTSD is a chronic condition that cannot be cured, only managed. We've taken the holistic approach to health as a family. Caring for yourself as a family member is very important so you can remain a calm, independent, loving shoulder amid all the ups and downs that your Soldier will experience. Most Soldiers we know do try various ways of self-medication, which is a very human response. But since some forms of self-medication are very damaging physically and psychologically, it is important to watch for these signs.

I hope that my candor isn't too depressing. What I would like to offer is encouragement. There is help out there and there are countless people who do know your struggles. Your Soldier is one of the lucky ones; he has a family that is engaged and attempting to help him reintegrate into life i a healthy way. He has a safety net. I would say to be pa tient with him and with yourself. Best wishes to you an your family now and in the future.

Judy's Response

Whew, I don't know where to begin. My mind and hea are all over the map.

I didn't ever think that I was unique in my concerns; I jus didn't know where to go to voice them. And, quite frankly, didn't want to face them. While we pray that his issue won't be severe, we must be equipped and prepared i case they are. I find it interesting that as unique as each in dividual psyche is, there are enough common responses t life's events that we can find camaraderie and solace i sharing them and learning from others. What a blessin that is!

I know I've said "thank you" throughout all of these va ous communications, but such simple words seem entire inadequate for expressing the depth of my gratitude to ea of you who has written. I am so deeply touched by wh feels like having been taken under the wing of the four you—knowing that all of you hear me, understand me, ha gone before me and are reaching back to extend yo hands to help our family maneuver through this journey.

We are stewards of America's bravest sons and daug ters. Our Soldiers come from patriotic families, and they t turn to them. We are privileged to train, inspire, lead a love them as best we can. This story highlights the actio of a few leaders, but we all know this sort of thing happe every day. If you are willing to share your story of adjusti to postcombat stress, contact peter.kilner@us.army.m Leadership counts!

Connecting in conversation...

...becoming more effective.



Art by Jody Harmon

Have you joined your forum?

Soldier Armed

Ears/SWATS

By Scott R. Gourley

Ears/SWATS, a palm-sized, 6.4-ounce integrated acoustic sensor and one the systems now helping enhance th the survival and lethality of U.S. rfighters, was first developed in e underwater realm.

"Our group that developed [Ears/ VATS] has been doing acoustics for years," said A. Donald Steinman director of transition programs for netiQ North America's technology utions group. "We grew up cutting r teeth in antisubmarine warfare, so worked in a much more compli- ed acoustic environment because e speed of sound in water is so ich faster."

The underwater speed of sound y not approach that of a speeding llet, but the technologies developed d honed in that environment have w been applied to helping U.S. rfighters locate the hostile origins those speeding bullets in current nbat environments.

"Ears man-wearable is what the my has designated as SWATS [sol- r-wearable acoustic targeting sys- n]," Steinman explained. "While s refers to a family of capabilities ilt on QinetiQ's core Ears sensor ck, SWATS capitalizes on that sensor ck and miniature display mounted soldiers' nonfiring shoulders to vide warfighters with a hostile fire/ ntersniper indicator."

"It sits passively and 'listens' for ustic 'events,'" he said. "When a shot comes in aimed at the war- ter, SWATS 'hears' both the bul- —more technically, the shock wave the bullet—and the muzzle blast m the weapon. It then goes through rge number of algorithms and, af- confirming that those two events ong together, derives a range and a ring to the shooter's position. It has GPS onboard, and because of t, it knows where the SWATS-wearer is. Then it can plot range and bearing to plot a specific grid position for the shooter."

The information enables warfighters to immediately move from a defensive posture to a fully responsive react-to-contact offensive posture.

"They can take advantage of terrain to provide cover while they can get weapons pointed and lead moving in the right direction almost immediately," Steinman said. Almost immediately equates to less than 1/10 second.

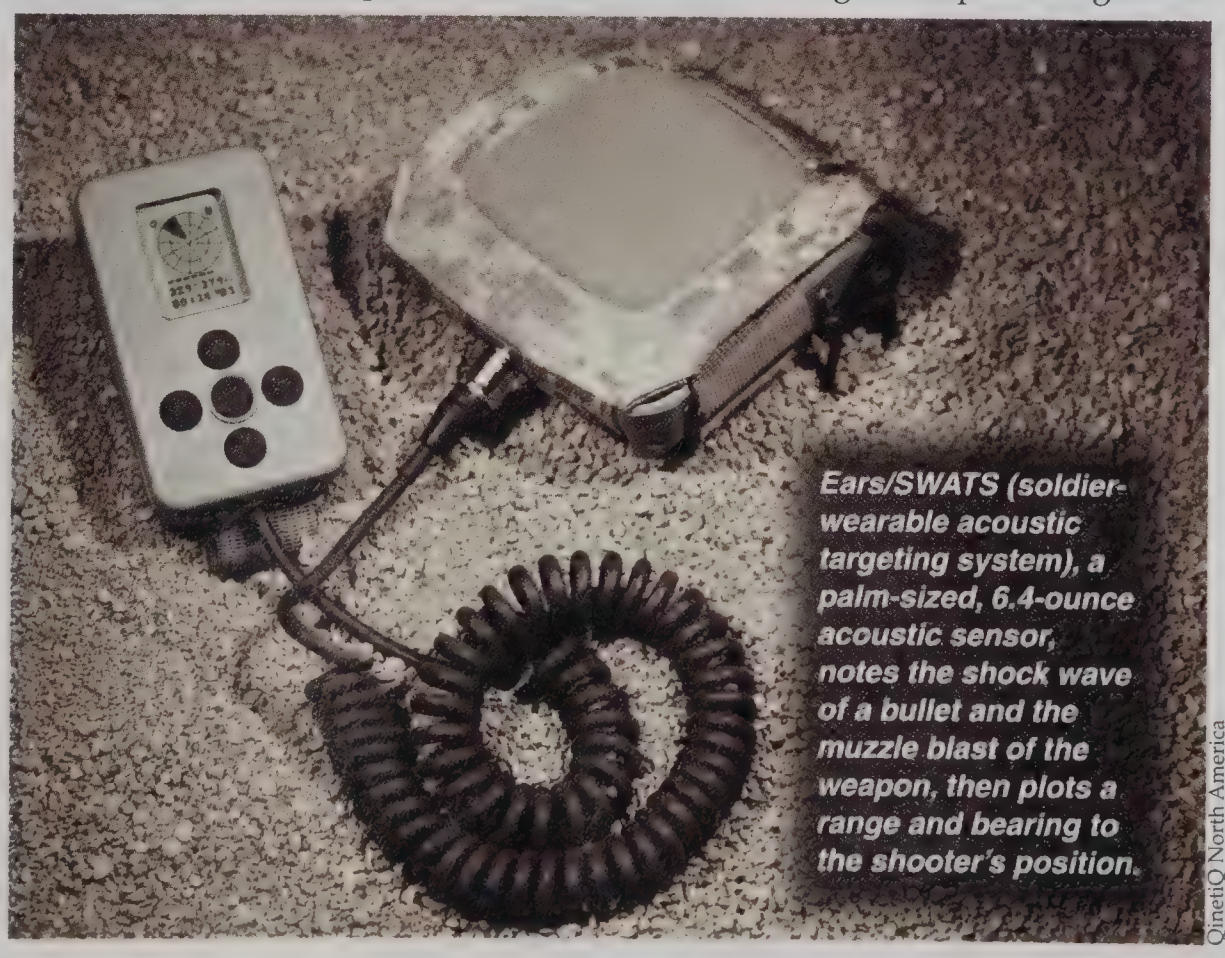
"SWATS is designed to, first, increase soldier survivability," he continued. "But, equally important, it increases soldier lethality so that we can stop the guys who are putting fire on us."

Emerging from the underwater environment, today's Ears/SWATS technologies entered the air about 10 years ago with programs related to counterbattery artillery fire.

"We were working on a program doing counterbattery solutions at 10- to 20-kilometer range scenarios and, during that research, ARDEC [Armament Research, Development and Engineering Center] asked if we could modify the technology to tell if we were receiving direct fire. This was probably about four to five years ago. They weren't asking us to localize it or point in any direction. They just wanted to know if we could tell them if they were being fired on," Steinman said.

An ensuing research project provided a solution that could tell not only whether someone was being fired on, but also applied algorithms from other company activities to reveal the firing quadrant solution and range.

"That was far beyond what the customer had asked for," Steinman said. "Once we satisfied the customer, of course, they changed their requirements, making them much, much tougher. And that is good because it forced us to really take into account the fact that the soldier is already overburdened with the amount of discrete pieces of gear he is carrying, the size of that gear and, most critically, its weight. So before we even started designing the core system, we were forced into a specific size, weight and power regime."



Ears/SWATS (soldier-wearable acoustic targeting system), a palm-sized, 6.4-ounce acoustic sensor, notes the shock wave of a bullet and the muzzle blast of the weapon, then plots a range and bearing to the shooter's position.

QinetiQ North America

After evolving over one or two more development cycles with ARDEC, the program made the transition over to Program Executive Office (PEO) Soldier, with ARDEC serving as the science team for the PEO.

"We have gone through two-and-a-half or three generations since that transition," Steinman said. "Each time, we have focused on improving the performance of the system—getting a better solution on the shooter's origin, making the system more rugged and improving the dynamics of the system."

The system dynamics reflect the fact that warfighters will quickly change orientation as they react to the shot and move into offensive posture. As a result, the system must adapt to provide revised information regarding the position of the shooter in relation to a new moment in time.

"If I break contact and change my distance and orientation to the shooter, the system will now tell me the new range and direction versus the information presented when that shot came in," Steinman said.

Asked about key discriminators between SWATS and some of the other available and fielded acoustic detection devices, Steinman noted that some of the other systems are much larger, requiring 25 watts of power or more.

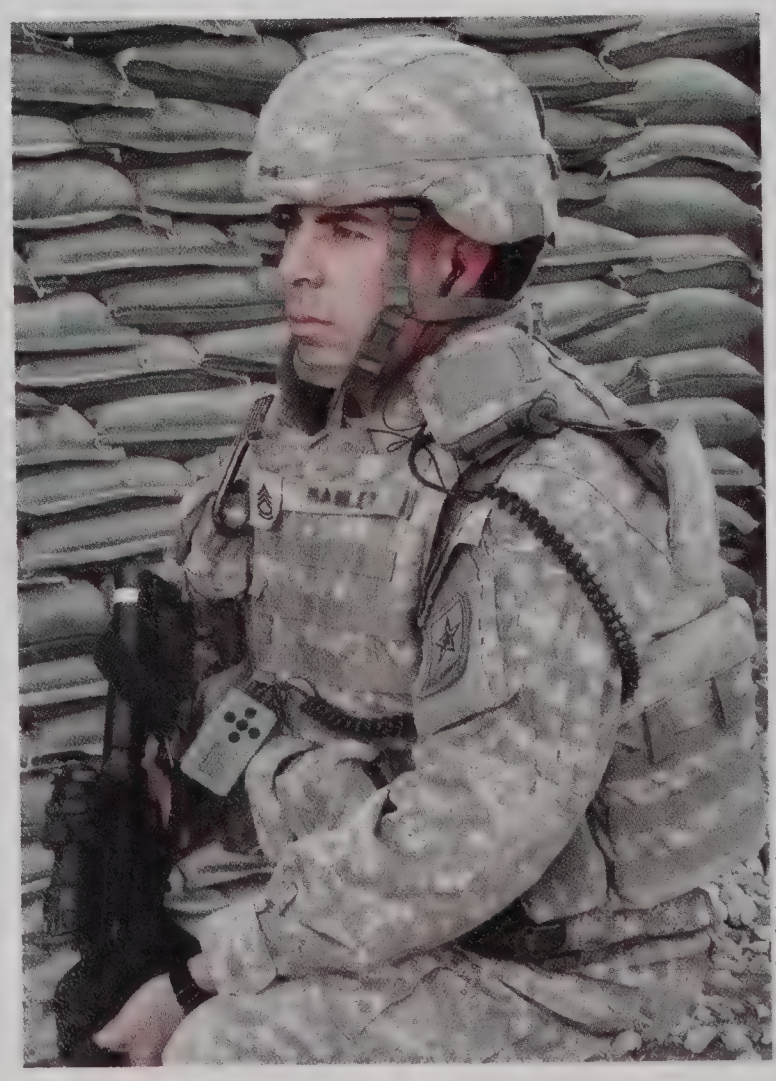
"Even in their lightest configurations, they weigh 20 pounds or so without their power sources," he said. "And those power sources can be pretty heavy.

"So when you're looking at a functional system, you're talking 50 pounds or more and for maybe four hours of operation. Our system, by comparison, operates for 12 hours on two small batteries and, with power, the man-wearable system comes in at well under 1 pound."



The Ears/SWATS sensor puck and display are mounted on a soldier's nonfiring shoulder. The system calculates the direction and distance of a gunshot in less than a tenth of a second, allowing the wearer to quickly shift from a defensive to an offensive position.

In addition to the man-wearable design, the Ears puck is also configured in a vehicular-mounted kit that weighs less than 5 pounds. "Both kits—the man-wearable and the vehicle designs—use the exact same sensor," Steinman said. "So there is interoperability."



QinetiQ North America

The sensor, which operates for 12 hours on two small batteries, is available in a vehicular-mounted kit that weighs less than 5 pounds.

In terms of current fielding status, Steinman explained that there are "well beyond 1,000 systems now in theater, and we are filling task orders as they come in."

"They are in both primary theaters as well as what I will characterize as other 'tactical locations' around the globe," he added. "The feedback we are getting from the field is outstanding. When the systems first arrived in theater, there was some prejudice against acoustic detection. But we have received feedback from soldiers who have said, 'The kit arrived in our unit last night at 1800 and this morning at 0500, we were attacked. Because of the kit, we were able to push the enemy back faster and more effectively than we ever have before.' And that has become a recurring theme across both theaters."

Emphasizing that this kit is being put to use on a daily basis, Steinman said, "This is important to both the individual warfighter as well as the Army because, most importantly, it increases survivability. When you're fighting an asymmetric war, your threat is as dynamic as you can imagine. So providing a capability that enhances soldiers' safety for them to return from their mission is key. At the same time, this is a war, so we want to improve our soldiers' ability to execute their mission. And this kit represents a key piece of the solution for them."



PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

The Hero Miles program reunites families during times of tragedy by providing free air travel to wounded or injured service members, their families and loved ones. Since its inception five years ago, the public's generosity has allowed us to distribute more than nearly 17,000 free airline tickets, saving our heroes and their families close to $22 million.

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AUSA Sustaining Member Profile

FedBid, Inc.

Corporate Structure—Founded: 2001. President and CEO: Ali Saadat. COO: MG Geoffrey Miller, USA Ret. Headquarters: 8500 Leesburg Pike, Suite 602, Vienna, VA 22182. Telephone: 877–9FEDBID. Web site: www.fedbid.com.

Today, every American is concerned about the state of the economy, and every government agency is searching for ways to stretch its budget, increase accountability and make the procurement process more efficient. Since 2001, FedBid has provided an online marketplace specifically tailored to increase the efficiency and effectiveness of the government procurement process. One way the U.S. Army is getting the most out of its tax dollars is by using the Fedbid online marketplace to maximize competition among sellers and enable its buyers to achieve the best available market price on commodity and simple service requirements.

Imagine the following scenario: A contingency contracting specialist sits at her terminal at Fort Campbell, Ky., creating a solicitation for hardened-case laptop computers for an end-user stationed in Mosul, Iraq. Her supervising contracting officer at a regional contracting conference at Fort McPherson, Ga., simultaneously checks the solicitation online for content and accuracy, offering suggestions regarding the procurement strategy. Minutes later, the requirement is posted online, immediately notifying thousands of sellers by e-mail and automatically posting to the governmentwide point of entry at www.fedbizopps.gov. Within hours, the contracting specialist has received multiple bids from half a dozen sellers, with pricing that is 10 percent lower than her independent government estimate (IGE). Each bid is comprehensively documented with complete line-item detail, a record of all terms and conditions as read and understood by the seller, all business and contact information, and complete socioeconomic data.

This scenario plays out on a daily basis on FedBid's Buyer-Driven Online Marketplace, where buyers from the Army and dozens of other federal organizations are able to buy commodities and simple services through an efficient, dynamic online buying process. FedBid is designed to automate the notification, competition and documentation aspects of the procurement process, while providing comprehensive support throughout, including training, sourcing, technical support, help-desk services, and research and development for additional marketplace features. Buyers post their requirements onto the FedBid marketplace from anywhere in the world with Internet access. The system automatically notifies sellers based on each seller's profile, and then those sellers have the opportunity to submit a single bid or multiple decreasing bids in a dynamic, real-time reverse auction.

Throughout the process, the buyer remains in full control, determining what to post, identifying the appropriate acquisition strategy and making an award determination based on the simplified acquisition award criteria that he or she included in the solicitation. FedBid's risk-free transactional fee pricing eliminates upfront investment, license fees, maintenance or consulting fees, and other costs for buyers and sellers while providing buyers with guaranteed results.

For the Army, FedBid's online marketplace acts as a force multiplier, enabling procurement personnel to improve productivity by processing more commodity requirements in less time and doing so in a regulatory-compliant manner. According to FedBid Chief Operating Officer MG Geoffrey Miller, U.S. Army retired, who oversees the company's sales efforts and market operations, the Army has used the online marketplace to reduce its procurement acquisition lead times on commodity buying. By lightening their commodity-procurement administrative load, Army procurement professionals can spend more time using their expertise to make best-value determinations, negotiate complex service procurements and focus on other critical contracting actions. In light of various published reports highlighting significant acquisition workload increases and growing workforce attrition, particularly due to retirement, using e-procurement tools that improve process efficiencies will remain critical to the continuing success of Army procurement efforts.

The FedBid online marketplace assists the Army in reducing procurement costs and stretching critical resources, while enabling just-in-time purchasing and broader use of the small-business community, including service-disabled veteran-owned small businesses. During fiscal year 2008, the Army competed more than 5,277 buys with an IGE of approximately $231.3 million. Utilizing FedBid's full-service reverse-auction marketplace, the Army pilot program saved nearly $33 million compared to the IGE, achieving robust competition and awarding more than 80 percent of the dollars to small businesses, including service-disabled veteran-owned small businesses.

As the Army complies with the stimulus package requirements for transparency and auditability, it will already have a proven, effective tool in its kit bag. The FedBid online marketplace provides comprehensive automated documentation for each procurement, including all sellers contacted and all bids received during the competition, to ensure fair and open competition and serve as an accurate, auditable record of how tax dollars are being spent.

FedBid's commitment to supporting the Army mission extends beyond simple business. It is committed to building an enduring partnership that assists leadership in fully supporting U.S. soldiers with a procurement process that improves efficiencies and maximizes the value of every tax dollar spent on commodities and simple services.

Reviews

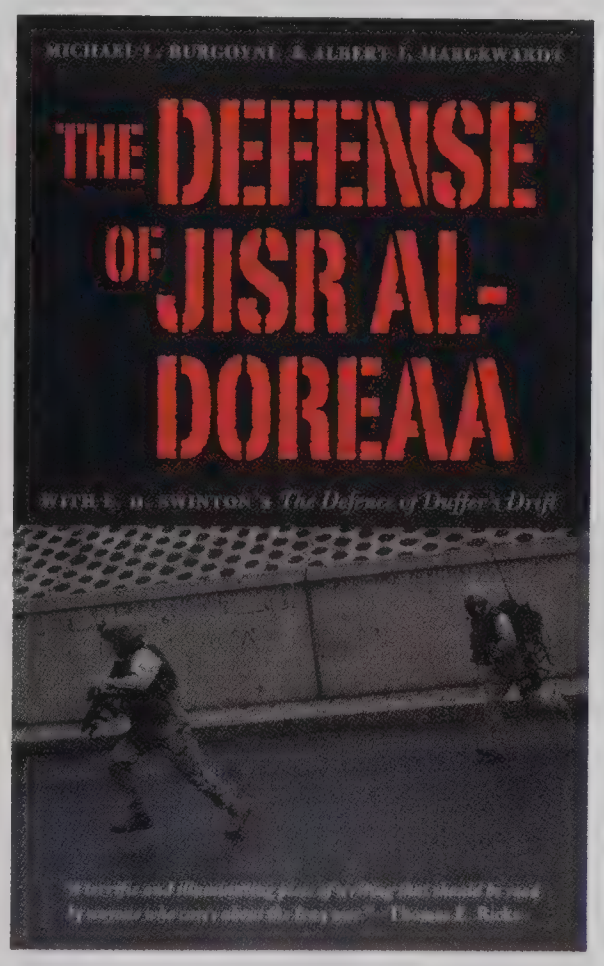
A Parable with Valuable COIN Lessons

e Defense of Jisr al-Doreaa With E.D. Swinton's *The Defence of Duffer's Drift.* *Michael L. Burgoyne and Albert J. Marckwardt. The University of Chicago Press. 178 pages; maps; black-nd-white photographs; $14.*

By LTC Jon Scott Logel

light of the literature published llowing the troop surge of 2007–in Iraq, *The Defense of Jisr al-Doreaa* timely, necessary tactical guide for ior officers today. While books h as Tom Ricks' *The Gamble* and Woodward's *The War Within* fo- on the political and strategic lead- who shepherded the surge and the nge in American strategy towards ounterinsurgency (COIN) in 2007– this novella is a prescriptive narra- of counterinsurgency lessons ed at the youngest leaders deploy- to Iraq and Afghanistan. The au- rs, Majors Michael L. Burgoyne Albert J. Marckwardt, have writ- arguably, the most practical book ome out of Iraq yet. As John Nagl es in the foreword, *Jisr al-Doreaa* is guide to the tactical challenges of Iraq] conflict that is sure to be- ne a modern classic." By combin- this new small-unit story with . Swinton's classic *The Defence of fer's Drift,* the authors have pro- ed a short must-read for every tenant preparing to lead soldiers COIN operations.

urgoyne and Marckwardt follow chapter format and literary de- s that Swinton used in *Duffer's t.* Swinton used the six dreams of Backsight Forethought to illustrate undamental lessons of small-unit ics learned during the Boer War of 9–1902. In *Jisr al-Doreaa,* the au- s use the six dreams of 2LT Phil nors, an armor platoon leader en e to Iraq, whose zone of responsi- y is a combat outpost at a bridge ne town of Jisr al-Doreaa. Like LT Backsight Forethought, 2LT Connors learns from each dream and applies the new lessons in each successive dream. Where Backsight Foresight surrenders to the Boers at the end of each failed dream, young Connors' failures lead to his relief by his commanding officer. By the fifth dream of each story, the young leader keeps his post, but not without one more painful lesson to apply to the sixth and final dream. This literary device works and is well suited for small-unit leader development.



In *Jisr al-Doreaa,* dreams one through three read almost like a morality play, but dreams four through six are excellent in creating the context for lessons in the tactics of COIN. At the end of each dream, Burgoyne and Marckwardt add to a cumulative list of steps for small-unit leaders to follow in the COIN environment. Culled from sources that include articles by GEN David Petraeus and David Kilcullen, and the authors' own experiences, the list of lessons learned forms an effective checklist for a platoon leader to use in planning and executing small-unit COIN missions.

Perhaps the most useful aspect of *Jisr al-Doreaa* is the illustration of how junior leaders should focus on the population as the center of gravity. In each dream, the success or failure of 2LT Connors depends on how positive his interaction is with the civilians in his zone. When he focuses too much on force protection, his platoon overreacts to a sniper attack by returning fire indiscriminately into a local farmhouse. In the brief but visceral description of the aftermath of screaming family members and dead civilians, the dream becomes a nightmare and cannot end fast enough for Connors. In the midst of his confusion, a media team arrives to record the carnage and put the young lieutenant on the spot just before his commanding officer relieves him of his platoon. Clearly, 2LT Connors and his platoon do not know how to address the local population in the conduct of their mission in this early dream. Conversely, by 2LT Connors' last dream, Burgoyne and Marckwardt have painted a scenario in which the platoon has increased the security of the people in al-Doreaa through thoughtful engagement with local leaders, the conduct of joint patrols with American and Iraqi security forces, and the integration of the Iraqi Health Ministry into the town's medical-care support. Just prior to waking from his last dream, 2LT Connors notes that "getting into firefights and raiding buildings is exciting, but creating a lasting stability is real victory."

While not the complete manual for teaching young officers how to lead soldiers in fighting insurgents among the people, *Jisr al-Doreaa* is an important tool for developing our military's young combat leaders. Burgoyne and Marckwardt have provided a great resource for the Army to use as it faces future operations in Iraq, Afghanistan and beyond. In addition, they have created a companion web site with

maps, illustrations, learning exercises and discussion boards. All authors' royalties from *Jisr al-Doreaa* benefit the Fisher House Foundation, the private-public partnership that supports families of injured American servicemembers. In crafting this book and online resource, Burgoyne and Marckwardt have made a significant contribution to soldiers, present and future.

__LTC Jon Scott Logel__ is a military professor of strategy and policy at the U.S. Naval War College. He served on the Task Force Lightning staff in Multi-National Division-North from 2006–07.

Introducing 'Lightning Joe'

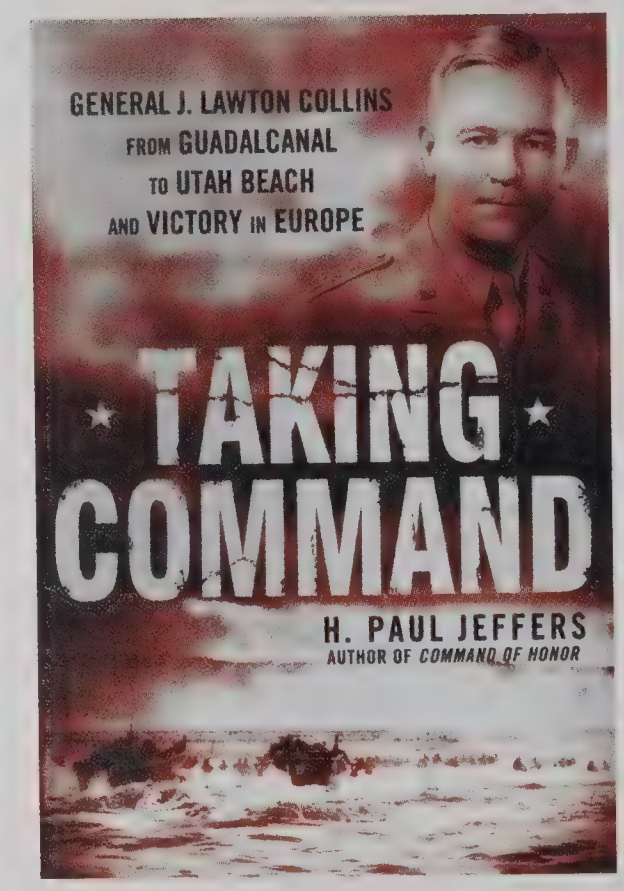
Taking Command: General J. Lawton Collins from Guadalcanal to Utah Beach and Victory in Europe. *H. Paul Jeffers. NAL CALIBER. 325 pages; black-and-white photographs; index; $25.95.*

By COL Stanley L. Falk
AUS retired

GEN J. Lawton Collins was one of this country's most impressive generals in World War II, with successful combat commands in both the Pacific and Europe. His 1979 autobiography, *Lightning Joe,* describes his wartime experiences, but he has been denied a solid biography by a qualified historian. H. Paul Jeffers' effort, *Taking Command,* while a good try, unfortunately falls somewhat short of this mark.

Jeffers, an experienced journalist and author of a number of other biographies, presents a well written, faithful account of Collins' professional career, but offers little on his personal life. *Taking Command* is based largely on published sources and particularly on *Lightning Joe.* In addition, the narrative is plagued by numerous small errors, misstatements and oversimplifications, as well as considerable extraneous detail not directly related to the general. Many of the low-level combat descriptions lack a clear explanation of Collins' specific involvement in and effect on the fighting, and the complete absence of maps makes them difficult to follow. The reader comes away with a good impression of Collins' accomplishments but a feeling that there is still something missing.

GEN Joseph Lawton Collins was a bright, aggressive, ambitious and successful commander—an effective and popular leader with a strong sense of his duty to both the nation and its sons he commanded. The future Chief of Staff of the Army graduated from West Point in 1917 along with three other eventual World War II generals—Mark Clark, Matthew Ridgeway and Alfred Gruenther—and only two years behind Dwight D. Eisenhower and Omar Bradley. By 1919, at the age of 23, he was commanding an infantry battalion in France.



For the next 20 years, Collins had an increasingly important range of assignments in staff and command positions, interspersed with tours in the Army school system as both student and instructor. In December 1941, just a few days after the Japanese attack on Pearl Harbor, he was appointed chief of staff of the Hawaiian Department, responsible, among other things, for coordinating the islands' defenses. He was then a colonel but was quickly promoted to the rank of brigadier general and, shortly thereafter, given command of the 25th Infantry Division and a major general. In late 1942, he took the division to Guadalcanal where, in mid-December, it relieved the weary and casualty-ridden 1st Marine Division, which had been in punishing action since early August.

The struggle for Guadalcanal was still far from over, and the 25th Division plunged immediately into fierce combat on difficult terrain. Collins' sound tactical judgment and aggressive, personal involvement in the fight soon earned him the nickname "Lightnin' Joe," after the "Tropic Lightning" designation of the 25th Division and the lightning bolt on its colorful shoulder patch. As ADM William F. Halsey, the South Pacific theater commander, put it, Collins was "quick on his feet and even quicker in his brain," and he pushed his troops forcefully in the sustained drive to defeat the Japanese.

A few months after Guadalcanal was secured, Collins and the 25th Division moved north to New Georgia and once again saw heavy fighting. Jeffers covers this combat only briefly, but it is clear that the division was a significant element in destroying enemy forces on the island.

A brief Christmas leave to visit his family at the end of 1943 found Collins in Washington, D.C., where he briefed Army Chief of Staff GEN George C. Marshall on the fight for Guadalcanal. In concluding, he added that, since he had successfully led a division for over a year, he now felt that he could command a corps. Marshall replied that GEN Douglas MacArthur had said that Collins was "too young" for such a command, and that ended the conversation. But Collins, who was actually almost 48, would get his wish and was soon on his way to London to assume an important role in Operation Overlord, the planned invasion of France.

Collins was one of three Army generals who had led combat forces in amphibious operations in the Pacific who were shifted to Europe to take part in the coming assault. The other

o were LTG Alexander Patch, who d held overall command on adalcanal and who would lead the asion of southern France, and MG arles Corlett, who had commanded 7th Infantry Division on Kwajalein the central Pacific and who would nmand the XIX Corps in a follow- role in Normandy. Collins would nmand VII Corps, which would d on Utah Beach on D-Day as part LTG Bradley's First Army.

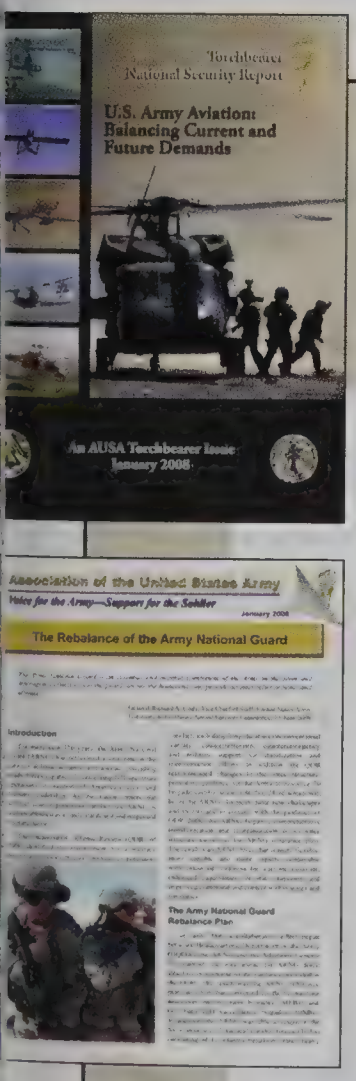
Early on the morning of June 6, 44, VII Corps stormed ashore on edule along the east coast of the erbourg peninsula. In response to llins' order that the assault "be shed at all costs," his troops struck idly inland to cut off the peninsula ile simultaneously pushing north a drive to capture the key port of erbourg. They achieved both objec- es in less than three weeks, with lins closely supervising and coor- ating their actions.

Come July, with American forces ely ashore on both Utah and Omaha ches, the First Army was still unable to break out of its initial lodgment. By the end of the month, Bradley had devised a new plan to end the stalemate, with Collins to spearhead the effort. He did so, he wrote later, because he believed the VII Corps commander was "nervy and ambitious" and had good tactical judgment. Collins did not disappoint him. On the heels of a heavy saturation bombing attack on German defenses, VII Corps pushed firmly through heavy enemy resistance, captured the key town of Saint-Lô, and broke the way open for First Army to begin its drive across northern France.

After halting a German counteroffensive at Mortain, Collins' troops helped seal the Falaise Gap and swept across northern France. In late October, they captured Aachen, the first major German city to fall to the Allies. They then found themselves enmeshed in the bloody fight for the Huertgen Forest. Hardly had this struggle ended when VII Corps was called upon to halt and then crush the northern wing of the German Ardennes offensive. After the German defeat in the Battle of the Bulge, Collins led VII Corps across Germany, capturing Cologne, helping clear the Ruhr pocket, and then driving eastward to meet Russian forces at Torgau on the Elbe River. This was only two weeks before the final German surrender and almost simultaneous with Collins' promotion to the rank of lieutenant general.

Taking Command covers these battles, strategic developments and the leadership demonstrated by Collins in a smoothly written narrative. Sometimes we see only the big picture, sometimes we are buried in a mass of details about small-unit actions, occasionally down to the battalion and company levels.

Jeffers then goes on to briefly describe Collins' postwar career as deputy commander and then chief of staff, Army Ground Forces; then Army director of information/chief of public information; deputy and later Vice Chief of Staff of the Army (during which assignment he was promoted to the rank of



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full general); and finally, from 1949 to 1953, Army Chief of Staff. It was in the latter position, in 1951, that he joined other members of the Joint Chiefs of Staff in a unanimous recommendation to relieve GEN MacArthur. As Jeffers points out, this was not an easy action for Collins to take, but the general believed that MacArthur's public disagreement with President Truman's policies and his failure to comply with specific directives from Washington, D.C., fully justified his relief.

Collins subsequently was the American member of the Military Committee of the NATO Standing Group and from 1954–55 was President Eisenhower's special representative, with ambassadorial rank, to Vietnam. In 1956, he retired from active duty after a full, exciting and distinguished career. For anyone not familiar with Collins' impressive accomplishments, *Taking Command* is a useful and readable account.

***COL Stanley L. Falk**, AUS Ret., Ph.D., is a military historian and author specializing in World War II.*

Briefly Noted...

Postcards from Checkpoint Charlie. *Bodleian Library. Distributed in the U.S. by University of Chicago Press. 112 pages; four-color illustrations; $20.*

Postcards of Political Icons. *Bodleian Library. Distributed in the U.S. by University of Chicago Press. 112 pages; four-color illustrations; $20.*

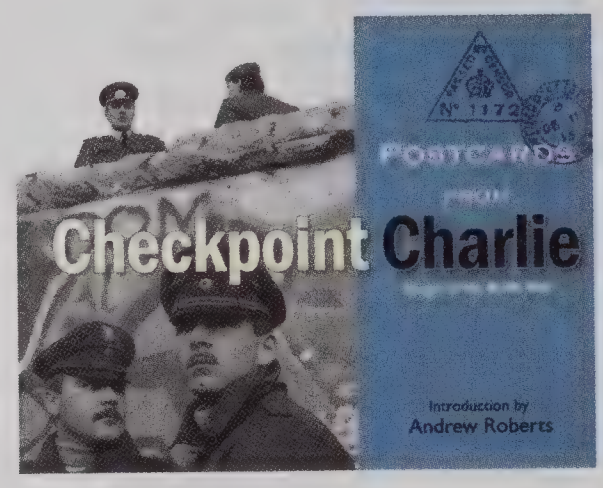
Presenting new selections from British collector John Fraser's extensive accumulation of postcards, the two latest volumes in Bodleian's postcards series are packed with details of historical and human interest.

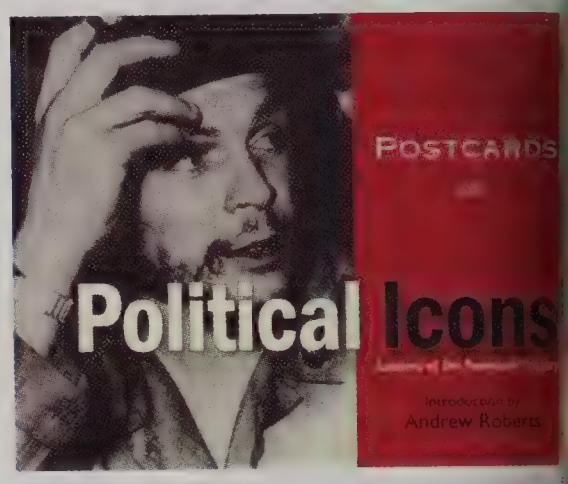
Postcards from Checkpoint Charlie documents the rise and fall of the Berlin Wall, focusing on the eponymous border crossing made infamous by Cold War movies and spy novels. Barbed wire was all that originally demarcated East and West Berlin; images of a soldier letting a child pass through it and another soldier hurdling across to the West embody the repression of the era.

Over time, the postcards show the barbed wire being replaced with a low wall and then a higher wall, an ever more formidable backdrop for the small wooden shed on Friedrichstrasse that composed Checkpoint Charlie—so-called because it was the third of the Allied border crossings.

The progression of the Wall is sobering, as are images of defectors escaping through a tunnel and East Berliners on ladders trying to glimpse their loved ones on the other side. More uplifting are the views of the Wall coming down in 1989, leading to the long-awaited reuniting of Berlin.

Postcards of Political Icons opens with portraits of Kaiser Wilhelm II and David Lloyd George, continuing through the 20th century with the major players in World War II, the Cold War and more recent events. Of special interest





are images of Hitler, Haile Selassie and Emperor Hirohito.

Also of note is a view of a hand holding back a curtain to reveal a photograph of Burmese protester Aung San Suu Kyi, who is currently under house arrest for the seventh successive year.

With significant background information provided for each postcard and introductions by Andrew Roberts, these collections will be useful both to those who remember the history depicted within and to those first introduced to it by these pictures.



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Historically Speaking

War, Peace and Army Transformation

By BG John S. Brown
U.S. Army retired

War costs money. Transformation costs money. Peace, a good thing, dramatically reduces the money available for defense in general and the Army in particular. These phenomena seem timeless, and they largely account for the fact that historical Army transformations have occurred in times of war. Cases in point include the mobilizations, modernizations and redesigns associated with the Civil War, World War I and World War II. Army Chief of Staff GEN George C. Marshall famously remarked that before Pearl Harbor the Army had lots of time but no money, and after Pearl Harbor the Army had lots of money but no time.

After World War II, defense budgets plummeted once again, but the nation hoped its atomic monopoly would buy security cheaply in the face of new and enormous worldwide responsibilities. The speedy loss of our atomic monopoly, communist expansion and North Korean aggression shook the nation's complacency and reinvigorated investments in national defense.

The Cold War became the principal basis for defense expenditures from 1950 through 1991. Too often portrayed as a static contest wherein two dinosaurs bellied up against each other for 40 years, the Cold War was, in fact, dynamic—diplomatically, politically, economically and, especially, militarily. Defense spending on both sides propelled cascades of modernization and redesign that were transformative over time. It is true that transformation during this period was threat-based, and that the threat was the Soviet Union and its allies—real or perceived. Transformation was also incremental, paced against long-term budgets and similarly incremental advances being made by the Soviets. It was a drawn-out version of our transformations in World Wars I and II, wherein we had tried to overmatch identified and agreed threats in much briefer periods of time.



Selfridge Air Museum

Nike missiles—considered the last line of defense during the Cold War—loom above officers and soldiers on Selfridge Air Force Base in Harrison Township, Mich. The missiles were in operation from the early 1950s through the early 1970s.

Following the Cold War, the U.S. Army attempted something we had not accomplished before: maintaining the battleworthiness of our units and effectively transforming them for future wars during a time of peace. GEN Gordon R. Sullivan's tenure as Army Chief of Staff saw a prolonged struggle to sustain quality amid shrinking budgets and force structure. His modern Louisiana Maneuvers nevertheless mobilized Army leaders to think deeply in light of new technologies and future challenges. Analyses shifted from a focus on a singular threat to the pursuit of capabilities broadly useful around the world and across the combat spectrum. Chief of Staff GEN Dennis J. Reimer consolidated and advanced GEN Sullivan's initiatives. By the end of his tenure, the workable prototypes of Information Age technologies that GEN Sullivan envisioned had been proven in the field, and units so equipped were beginning to show up in what was known to most as Force XXI, but was officially called Army XXI. GEN Reimer also experimented with the brigade-based Strike Force and envisioned a more distant Army After Next. Chief of Staff GEN Erik K. Shinseki fathered the march, morphing Army XXI into the Legacy Force and the Army After Next into the Objective Force while conjuring up a brigade-based Interim Force to cover the ground between them. The Interim Force, now our Stryker Brigades, went from a mere idea to deployable units during GEN Shinseki's tenure—no small feat. GEN Shinseki also advanced the regularization of budgets for Army transformation, building much that had been "out of hide" into long-term programs of anticipated expenditure.

Contrary to popular belief, the 9/11 attacks do not seem to have marked an institutional watershed for the Army. Through 2002, deployments to Afghanistan and elsewhere were numerically on par with deployments through most of the 1990s and fit in well with notions of a broadly capable expeditionary Army operating all over the world across the full spectrum of conflict. A momentary budgetary spike with respect to homeland defense ebbed as the Transportation Security Administration stood up and routine security responsibilities again fell under civilian control.

Operation Iraqi Freedom (OIF) was the watershed that changed the paradigm. Whereas 14,000 soldiers supported Central Command in 2002, 160,000 were required in 2003. By June 2003, it was clear that there would be an OIF 2 followed by an OIF 3, with unknown and unnumbered rotations and

t. Rather than sustaining forces one-twentieth the size of active components in active operations overseas, the ny would sustain forces one-third the size of the active nponents in such operations. This does not include forces eady forward deployed and other commitments. Six- nth tours were jettisoned in favor of tours lasting a year nore. An Army that had been between wars was at war.

hief of Staff GEN Peter J. Schoomaker, arriving as Iraq morphed from a brief expedition into a long war, revis- l transformational efforts and ultimately redefined them. war we were in trumped the more distant future. Until n, Objective Force technologies likely to be useful in Iraq l Afghanistan were brought forward and fielded as idly as possible. Others slipped to the right. An increas- number of modular brigades facilitated recurrent unit tions, as did redesigned training, manning and installa- policies. Stryker Brigades came of age, an Improvised losive Device Task Force evolved into a $4-billion-a-year anization, and the Army honed tactics, techniques, proce- es and equipment applicable to contemporary opera- ns. The 2005 version of Field Manual 1 *The Army* ex- ded on the pithy comment: "Army transformation is not nd in itself; it contributes to accomplishing today's mis- ns." In effect, Army transformation was again threat- ed, with the threat being adversaries we currently fought. GEN Schoomaker necessarily narrowed the focus of his decessors, he considerably expanded the footprint of r initiatives throughout the force. He had more money. In al year (FY) 2005, his base budget was about $100 billion, supplementals totaled an additional $60 billion. In FY 6, these figures were $100 billion and $70 billion respec- ly. Applied Blue Force Tracking kits on vehicles exploded n around 1,000 to 55,000 during his tenure. Global posi- ing systems, satellite communications, digital equipment nany types and various off-the-shelf equipment procured ugh the Rapid Fielding Initiative became similarly ubiq- us. Installations already primed for expeditionary com- generated and deployed forces routinely. Army un- ned aerial vehicles logged thousands of hours during first year in Iraq, and those numbers rose steadily. As op- ions miniaturized and dispersed, soldiers equipped and able of effectively bringing joint direct attack munitions other precision-guided munitions to bear multiplied by rder of magnitude. Digital networks promulgated infor- ion and training of all types theaterwide, and deployed iers had the services of the Internet at their fingertips. net result was a qualitative edge that allowed tiny forces



U.S. Army/SPC James B. Smith Jr.

Soldiers from 101st Military Intelligence Battalion, 3rd Brigade Combat Team, 1st Infantry Division, load an RQ-7 Shadow 200 tactical unmanned aerial vehicle onto its launcher at Forward Operating Base Warhorse, Iraq, in 2004.

to be effective in huge countries with vast populations far beyond what numbers would suggest. In any previous era, a "surge" of 30,000 troops into a restive population of 29 million would have been laughable. In Iraq, the quality of our forces made them count for a lot more. There have been no more Task Force Smiths.

Some day, hopefully soon, the scale of our missions in Iraq and Afghanistan will downsize dramatically as we increasingly turn these wars over to the locals. With luck, the pace of deployments will drop to levels similar to those of the 1990s (still admittedly high). The Army will once again be effectively between wars. The flip side of such good news will be a drop in funding. Although Congress and the public are now acutely aware of the value of ground forces, this has not much altered percentile service allocations in the Defense base budget. The Army has, by and large, fought and transformed itself with supplemental appropriations. Supplementals will dry up. Secretary of Defense Robert M. Gates bemoans the fact that there has been no particular connection between previous Quadrennial Defense Review results and congressional budgets.

When we once again shift from threat-based transformation focused on the immediate and tangible to capabilities-based transformation anticipating the distant and unknowable, we will again have far more time and far less money. We would be wise to keep this recurring phenomenon in mind. ★

Recommended Reading:

Adams, Thomas K., *The Army After Next: The First Postindustrial Army* (Palo Alto, Calif.: Stanford University Press, 2008)

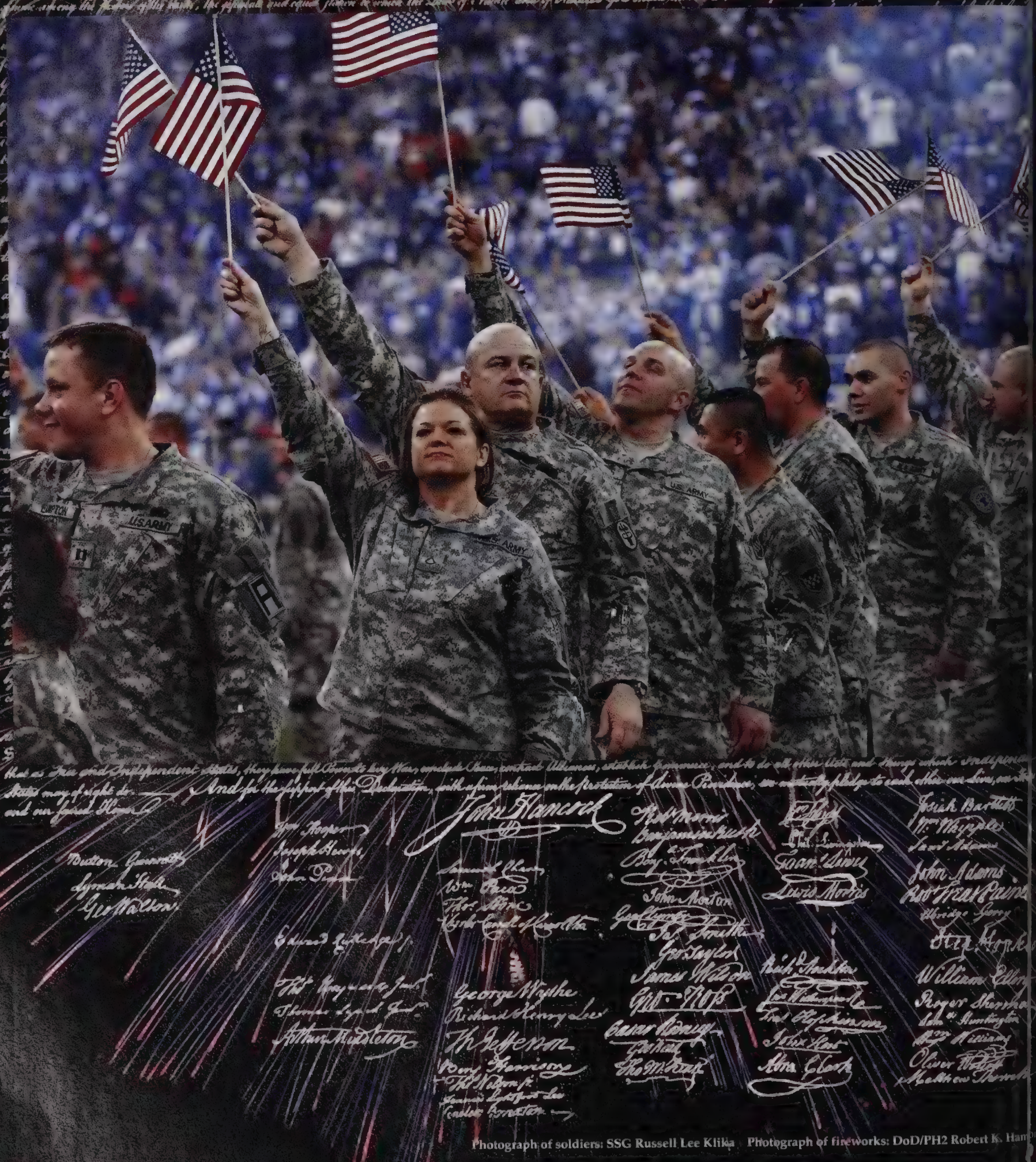
Blaker, James R., *Transforming Military Force: The Legacy of Arthur Cebrowski and Network Centric Warfare* (Santa Barbara, Calif.: Praeger Security International, 2007)

***John S. Brown**, USA Ret., was chief of military history at e U.S. Army Center of Military History from December 98 to October 2005. He commanded the 2nd Battalion, 66th rmor, in Iraq and Kuwait during the Gulf War and returned Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana niversity. His book,* Kevlar Legions: Army Transformation 1989–2005, *is forthcoming.*

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Green Warriors: Environmental Opportunities in Contingency Operations
By David E. Mosher and Beth Lachman
Careful management of environmental issues in contingency operations not only can help the Army meet mission objectives and achieve national goals, but also protect soldiers' health; reduce costs, potential liabilities and logistical burdens; and improve relations with local residents. ***Page 30***

Soft Power Hurts Hard Heads: How Can an Army of Hard Heads Grow an Officer Corps Capable of Using Soft Power?
By COL Christopher Robertson and CPT Katie Breckenridge Crombe
To ensure the Army has the agile and adaptive leaders it will need in the future, its senior leaders must provide young officers with educational opportunities as well as traditional training. ***Page 37***

'Stacking Iron'—MAFEX Prepares Air Assets for Army Forcible Entry Operations
By Scott R. Gourley
The most recent semiannual Mobility Air Forces Exercise massed geographically separated air platforms to carry out air-land and airdrop insertion of U.S. soldiers and simulate elements of the 82nd Airborne Division's forcible entry air operations. ***Page 44***

The 65th Anniversary of D-Day
At the American Cemetery in Normandy above Omaha Beach, President Barack Obama paid tribute to the men who landed there, and French President Nicolas Sarkozy presented France's highest honor to 38 American veterans. ***Page 52***

1st Infantry Division Soldiers Honor D-Day Heroes *By LTC Matthew S. Hackathorn*
Soldiers of the Big Red One, which led the way ashore at Omaha Beach during the invasion of Normandy, France, on June 6, 1944, met with World War II veterans in Normandy; Wheaton, Ill.; and Abilene, Kan., to celebrate the 65th anniversary of D-Day and honor the heritage of the 1st Infantry Division. ***Page 55***

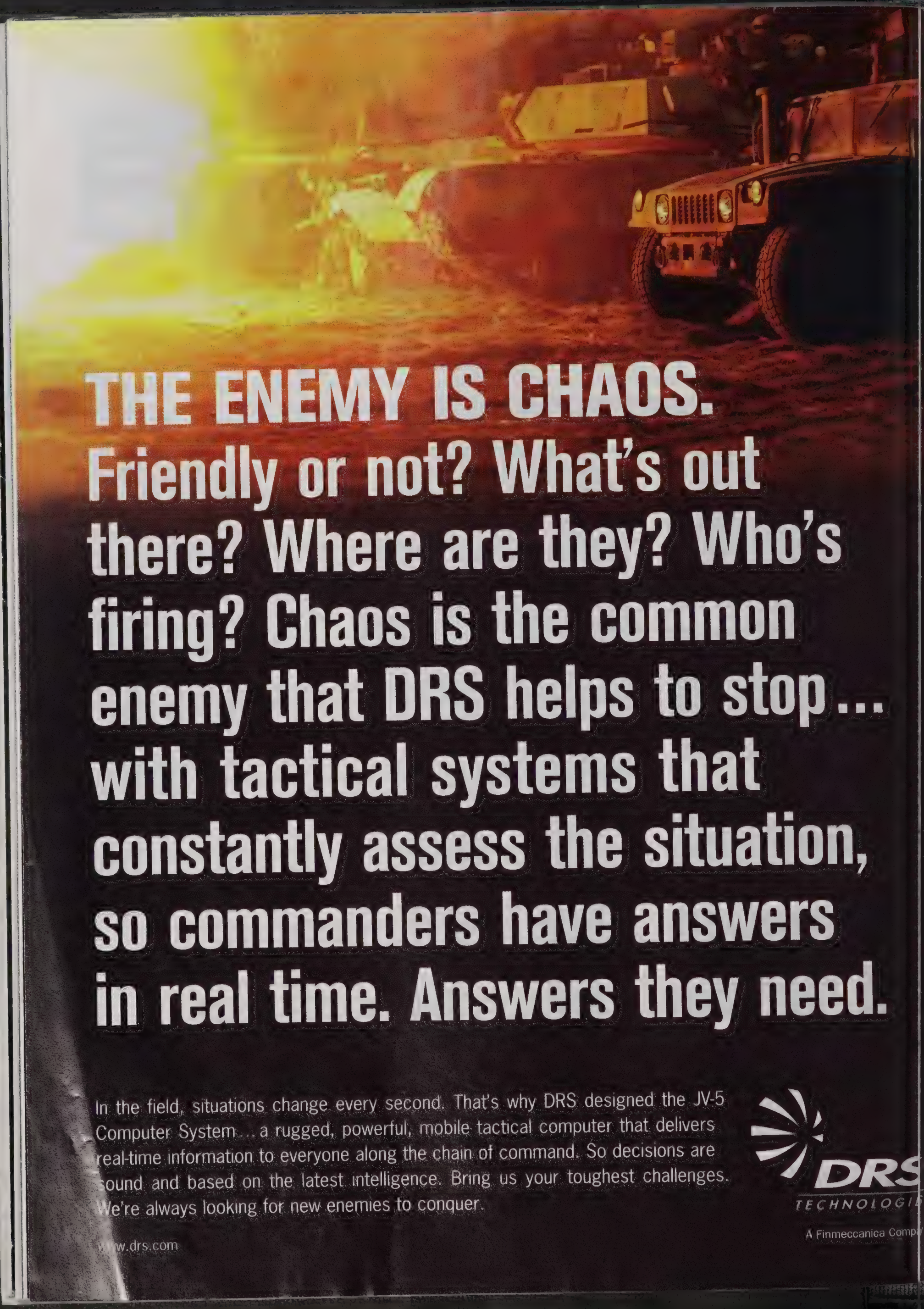
Follower Robotic Vehicles Improve Convoy Safety *By CSM Gary R. Carpenter, USA Ret.*
Convoy Active Safety Technologies is a system designed to keep a convoy from collapsing upon itself, thus limiting the exposure of a large number of vehicles and cargo in a combat area. ***Page 61***

Women in Military Service for America Memorial *Photographs by Dennis Steele*
The Women in Military Service for America Memorial, in Arlington, Va., documents the experiences and sacrifices of all women who have defended America. ***Page 66***

CompanyCommand—Building Combat-Ready Teams: Leaders Describe How the CompanyCommand Forum Makes a Difference
Leaders across the Army share their stories of how the CompanyCommand forum has helped prepare them for deployments, strengthened their skills, and developed and sustained them as they moved from deployment to deployment. ***Page 71***

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Letters

BCTP Embraces Blogging

■ The Army, as many have recently seen, has embraced the idea and concepts of emerging social media and specifically the concept of blogging. Although relatively new as a practice for many officers, noncommissioned officers and soldiers, it is time to jump on the social-media highway as others around the world have done, and the Battle Command Training Program (BCTP) is taking the lead in telling the Army story to those beyond the confines of Fort Leavenworth.

Here at Fort Leavenworth, BCTP, the only nondirt combat training center (CTC)—or as some may consider it, the virtual training center—has taken this new task to heart and begun a blog about experiences on the road. The main venue for the officers and NCOs of BCTP to get their experiences to the vast numbers of field grade and senior NCOs is via the Combined Arms Center (CAC) blog at http://usacac.leavenworth.army.mil/BLOG/.

BCTP's site within CAC's site is: http://usacac.leavenworth.army.mil/BLOG/blogs/bctp/default.aspx and contains subjects including what it is like to serve in BCTP; learning your craft at levels above brigade; the first nested training scenario between BCTP and Joint Readiness Training Center (one of the "dirt" CTCs); what we provide to help get it right for everyone's tool kit; and embedding an Associated Press reporter into the actual exercise.

The venue of blogging allows, within the parameters of operational security, the sharing of thoughts and ideas that are timely, relevant and add to the transparency of units' preparations to deploy to combat and other contingencies. The value of the open exchange of ideas on "best practices" and "how-tos" cannot be fully measured in the numbers of visits or views, but in the day-to-day practices that it fosters as well as ensuring that the public has a window into its Army.

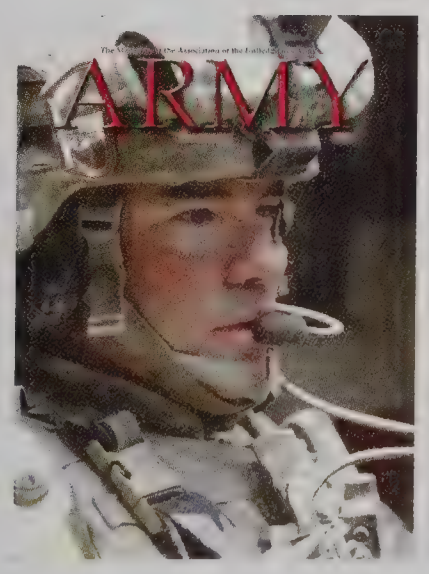
I invite everyone to take a look at what our stellar officers and noncommissioned officers have to say about what is happening in BCTP around the globe.

COL MARK MCKNIGHT
Commander, BCTP
Fort Leavenworth, Kan.

Full Spectrum NCOs

■ In his June "Front & Center" article, "Let's Return to the 'Full Spectrum' NCO," CSM Jimmie W. Spencer, U.S. Army retired, discusses the important lessons of close-order drill for the leader and the led. One command I served used a garrison-provided color guard for all of its ceremonies. I wanted the color guard to wear our own organization's shoulder sleeve insignia, so I assigned all of the ser-

This Month's Cover



CSM Jeffrey Huggins of the 4th Brigade, 2nd Infantry Division, talks with his crew onboard his Stryker vehicle during a training rotation at the Joint Readiness Training Center (JRTC), Fort Polk, La. The Fort Lewis, Wash., brigade is designated as the last "combat" brigade to be deployed to Iraq under the Obama administration's plans.

Next month's issue of ARMY will feature senior NCOs of the 4th Brigade discussing training at JRTC and their views on NCO leadership during the Army's Year of the NCO. *(Cover photograph by Dennis Steele)*

geants first class and above in the headquarters to the color guard and trained them during sergeants' time.

They drilled on manual of arms, colors reverse march, and squad and individual drill. What I wanted was the capability to support the command with its own soldiers, but besides this, I got a cadre of noncommissioned officers that displayed high morale, discipline, *esprit de corps* and proficiency. I was initially surprised at this result, but soon realized (and relearned) that close-order drill is a leadership exercise that builds these indicators of leadership in an organization.

CSM JOHN BECK, USA RET.
San Antonio, Texas

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■ The article written by CSM Spencer is on point. He is an accomplished NCO in his own right, and his assessment hit home the first time I read his article. CSM Spencer and his peers are the reason we are enjoying the reputation that we have as NCOs today; their labor has resulted in our NCO Corps becoming a professional enlisted force that is the envy of the world.

CSM Spencer and others like him are an untapped resource. In his article, he states that "the NCO Corps did not tilt out of balance overnight. It happened slowly as the pre-9/11 NCOs moved up the chain and were replaced by the younger generation." Those leaders who have moved up the chain are saddled with the responsibility of training the younger generation who will one day replace them. It is those leaders, regardless of position or status, who must set the course for the next 20 years, just as CSM Spencer and others like him prepared me for my future. In other words, we must give back and make it better for those following us.

Another point CSM Spencer made addressed basic soldiering. The Army's implementation of the Noncommissioned Officer Education System after the Vietnam War was a phenomenal idea. I am a product of that system. Like all things, with time comes refinement. In my opinion, however, refinement does not mean getting rid of a course, reducing the time needed to train, or using the units as an excuse to say soldiers will recover the training lost once they get to their parent unit. (I think we went down this road a couple of decades ago.) Units do not *build* professional NCOs—academies or schools build professionals, and the units *refine* that graduated product. There are some who say, "If it was good enough for me, then it is good enough for you." Others say, "Well, I didn't have it and I made it … so you don't need it." Last but not least, some say: "Let's simulate, let's do it online to save money, place them in front of a computer and they will learn it." This is the wrong idea, and CSM Spencer's article highlights this point—the need to get back to the basics.

Freedom truly isn't free! It is expensive, it takes time and it takes a lot of sacrifice. I have spent almost a half-century on this Earth and a quarter-century in our Army. The changes I have seen within our country and our Army are vast, from segregation, which I experienced firsthand, to the election of our first African-American President. That unique event was made possible through the blood, sweat and tears of servicemembers past and present. It is through the ultimate sacrifices of past, present and future servicemembers that these events become reality. If we fail to listen to or heed the concerns and warnings of CSM Spencer and others like him, however, we are doomed to revert to what we once were.

CSM JEFFERSON VARNER III
Fort Myer, Va.

■ I fully understand what CS Spencer was alluding to in his artic Those areas concerning discipline, i spections and so on were often call "sergeant's business." Unfortunate time and resources are limited, ar this nation faces possibly a full deca in actual combat. Hard choices mu be made, and the emphasis is wise placed on combat-focused trainir not old-fashioned Inspector Gene inspections and parades.

Several years ago, Training and D trine Command replaced drill and ce mony and different types of inspectio with more combat-related training, cluding more time in the field for ba and advanced individual training. A former Cold War-era drill sergean fully understand the reason for thi went through basic training in 197 we were being trained for possi combat in Vietnam.

CSM Spencer's call for bring back "the school of the soldier" v probably fall upon deaf ears. Wh Time and resources. This is not Army of the Vietnam War or post-V nam War era. Discipline and troop hesion have changed dramatica Gone are the days of open bays a even squad bays. NCOs above rank of sergeant don't reside in the lets. The standard now is two pers to a room in billets that would put nior bachelor enlisted quarters and ficer billets of bygone years to sha The implementation of the Better portunities for Single Soldiers prog also brought about a great change soldiers residing in billets.

Conducting school of the soldier mally took place on Saturdays an volved many NCOs. Now many N have families. Who's going to exp to those families that these NCOs now spend the limited amount of deployment time they have wor on one or more weekends? Time now seen as an effective way of ta care of soldiers and/or their fam As far as resources go, where are commanders and sergeants majo ing to find them?

Perhaps both time and resou could be found during the reg training week and utilizing serge

ime training to the fullest extent. Remember that primary training focus is nd must always be on individual and nit-related tasks that support the verall combat mission of the unit. he era of starched fatigues and spithined boots has passed. We are now functional Army, a combat uniformvearing Army in full combat mode or years to come.

There are no easy answers to what SM Spencer has pointed out. We will ave NCOs and officers who will ave spent more than a decade of a 0-year career in actual combat. Mainining a strong and disciplined Army ill require hard work and sacrifice, ut it is possible.

CSM RONALD LOUIS TOWERY,
USA RET.
Fayetteville, N.C.

■ I applaud retired CSM Spencer—I ound his article well written and very mely. I have heard other command rgeants major voice the same conrn—that we are inadvertently failg to instill certain traditional NCO leadership skills in our combat veteran junior leaders. As CSM Spencer states: "We seem to have lost sight of the importance of basic soldier tasks in the development of noncommissioned officers."

I agree it is not our young NCOs' fault; Army leadership, at the troop level, must ensure that we are systematically reinforcing the fact that our first-line supervisors—especially our corporals, sergeants and staff sergeants—are responsible for their soldiers 24/7, both on and off duty.

Army leadership at the highest levels must also play a role and ensure that our policies and programs support our troop commanders and the chain of command. We must recognize that changes in policy or new programs can, as CSM Spencer said, invoke "the law of unintended consequences."

Case in point is the design of junior enlisted barracks that have individual exterior room entries. These may be good for privacy and the quality of life/well-being of the soldier, but does this design support the troop commander's need for command and control, good order and discipline, and the health and welfare of his soldiers? We need to understand the potential consequences of everything we change and war-game these until we are confident that we are not causing problems for our commanders or the chain of command.

Take privatization of junior enlisted barracks, for example. The barracks privatization initiative (BPI)—as it's known by its proponent, the Installation Services Directorate of the Assistant Chief of Staff for Installation Management—would have private developers manage our barracks similar to apartment complexes or dormitories. This may be good for utilization efficiencies, but what about unit integrity and command and control? How does this initiative support the development of junior NCOs and support them in caring for their soldiers 24/7, when soldiers may be assigned wherever a vacancy exists? What unseen effects could this initiative have on undermining the chain of command?



How does this help us develop our junior leaders and instill trust and respect for them in our enlisted soldiers? If NCOs are responsible for their soldiers both on and off duty, then our training of junior NCOs and development of soldiers must take place where they train, work and live. Any initiative that involves the barracks must then support that process as traditionally done, with our corporals and sergeants being responsible for how their soldiers live in the barracks. Everything from police call to common-area cleaning and area beautification is part of the training and development of junior NCOs and soldiers, and they afford us the opportunity to do this in a benign environment.

ADM Michael G. Mullen, Chairman of the Joint Chiefs of Staff, recently wrote of what he has learned from the Army. He stated: "The first thing I learned about the Army is *hooah.* There are 1,000 or 10,000 or 100,000 different ways to say *hooah.* But I learned that it is more than just a battle cry; it is a way of life. It says you will never quit, never surrender, never leave your buddy. It says that you are proud of the hardships you have endured because there is a deep meaning in every one of them."

We can thank our NCOs for instilling the Army Ethos into our soldiers, for making them *hooah.* Now we must ensure that these traditions are not lost or compromised by some "new idea," and we should be careful to ensure that everything we do or propose to do supports our basic leadership tenets of accomplishing the mission, taking care of soldiers, using the Army's resources wisely, and not being fooled into giving up our traditions and the Army way of life.

Not every new idea that comes along is right for the Army. It's good that we examine the "best business practices" available to us. We must, however, continually evaluate those against the Army's major imperatives and not lose sight of the basic purpose for our existence: to provide the world's premier ground-fighting force capable of protecting the American way of life in any and all circumstances, anywhere in the world. That takes dedicated, well-trained, committed and hardened warriors, and a force capable and willing to put boots on the ground when necessary, trained and prepared to fight and win. Our NCOs know what it takes to develop a soldier, a spartan warrior, who is well trained, physically and mentally fit, and prepared to endure the hardships of battle. Let's make sure we don't undermine their efforts to keep us Army Strong. *Hooah.*

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■ In his June article, CSM Spencer opens a very important and interesting discussion. How have seven years of war affected our corps of noncommissioned officers? Certainly the results are positive in many ways: Our NCO Corps is combat hardened by multiple deployments to the war zones, and the bravery, courage, endurance and character of our NCOs are exemplary and envied by armies around the globe. Has the necessity and immediacy of training combat tasks put all else on the back burner? Is our NCO Corps, particularly our platoon sergeants and below, no longer a full spectrum corps? Are we instilling the building blocks of leadership and discipline in our junio noncommissioned officers? Are we stil conducting, as CSM Spencer calls it Leadership 101, mentoring our NCO in training, leading and caring for sol diers and their families in a full spec trum environment? If not, then cer tainly there is a long-term impact bot on the corps of noncommissioned off cers and the health and welfare of ou Army.

There have been a number of art cles in various publications regardin Army training—whether we shoul have an Army trained for major com bat operations, irregular warfare, peac operations, or other operational theme across the spectrum of conflict versu full spectrum operations. Maybe a sim lar discussion needs to take place r garding our NCO Corps.

We read of upcoming reductio in the length of the Warrior Lead Course and the elimination of son functional courses for our NCO How will these affect the maturati of our next generation of NCO lea ers? I encourage others, especial members of today's NCO Corps, enter into this discussion and t ARMY readers the status of the NC Corps from your foxhole.

CSM LARRY PENCE, USA RET.
Fredericksburg, Va.

CompanyCommand

■ As usual, the July CompanyCo mand ("Supporting a Combat V eran's Family") has done an excell job. I'd like to add a few pointers, there is additional complexity to a m tary veteran's immediate return fr combat. The combat veteran will undergoing two large transitions multaneously: the transition from co bat to peace, and the transition fr the Army to the civilian world. T process is quite challenging and c for a great deal of structure, und standing and confidence in order f to be done correctly. Here are so points of advice to help Douglas a others make a successful transition.

■ What are your plans and goa The military provides a great d of social and professional struct on a daily basis. The fact that Ar

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life is so structured (physical training, breakfast, training, work details and so on) actually helps reduce a great deal of stress because even after the return from combat, there is a daily structure to help guide you through life. Even for the most senior military veterans, there is a whirlwind of change and a complete lack of structure once you are released from active duty and return to the civilian world. Freedom is a great thing, but too much unstructured time can be a downfall that leads to excessive TV, video games, eating, solitude and alcohol. Military veterans need a plan to create structure and discipline in their daily life so they do not lose focus on their goals. I would advise Douglas to create a list of what he wants to do: exercise, see friends, sit in on classes at a college, work a part-time job, start a small business, or take on a constructive hobby such as photography or hiking. Having a daily structure built around goals makes the combat-to-civilian transition immensely easier.

■ What is your story? Recent military veterans, since the start of the First Gulf War, make up a small percentage of the U.S. population. So Douglas will run into the inane questions of: "How many people did you kill?" "Why are people still at Guantanamo?" "Where is Iraq?" "Are we still in Iraq and Afghanistan?" (The last is my personal favorite.) It is best to have a set of practiced responses to these questions and others instead of becoming angry or despondent at people's apparent lack of knowledge or concern. The vast majority of civilians are exceptionally proud of the military and its performance in combat in Iraq and Afghanistan. The problem that neither Douglas nor anyone else can solve is the growing gulf between the majority of Americans without military experience and the U.S. military veteran. A preset story that is simple and well described or some humorous anecdotes will greatly help Douglas explain his time in combat and make him more comfortable doing so. This will not close the experience gap, but it will make Douglas and others more at ease explaining their time serving the country to an audience that knows very little about the military.

■ Take some time to explore. The literal descent from combat to the civilian world can be exceptionally disorienting. I would advise Douglas to structure his time, but to also take some time to explore the world that he has been away from. Traveling, doing the Outward Bound program for veterans (www.outwardbound.org), starting a small business, or taking a few college classes prior to full-time enrollment are excellent ways to try things out, explore and make sure that your next path in life is one that you want. Immediately going from combat to the civilian world to a job or the college classroom can at times be too much. A three- to six-month time frame to get comfortable, get sorted out and explore your options before jumping in is an excellent way to help make the combat-to-civilian transition a success.

■ Understand your daily risks. With the newfound freedom of the civilian world, there are plenty of things that can derail your plans. Alcohol, drug use, fast cars and motorcycles, men and women more interested in your bank account than you, and personal financial mismanagement are just a few of the dangers to which recent military combat veterans have succumbed. The transition from combat to the civilian world will be difficult, and there will be residual effects from combat exposure such as combat stress and the potential for post-traumatic stress disorder (PTSD). However, the use of counseling, veteran-to-veteran conversation, exercise, a good diet and programs that teach military veterans stress-mitigation techniques, such as the nonprofit ONE Freedom (disclaimer: I am a member of the board), all help reduce risky behavior and make for a much more successful transition. For me, exercise, no alcohol, breathing exercises and visualization exercises were absolutely critical in making the combat-to-civilian transition easier and a success.

■ Don't be afraid to ask for help and to help others. There are hundreds of resources to help military veterans process Veterans Affairs claims, trea PTSD and find employment, an there are college programs to help vet erans make the transition from com bat to the classroom. In addition, mili tary veterans are fantastic leaders, s there is space to help with organiza tions such as Habitat for Humanity shelters for homeless veterans and ex isting veterans service organizations The ability to accept help and offer t help others is a skill that I have bee amazed at in recent combat veterans.

Douglas' path will be his own. I an others have offered the steps and ad vice that we wish we had know about when we came back from com bat. The experience of combat vete ans is universal in that combat ha changed us, but we are all seeking t use the experience of combat an what it taught us to improve our dai lives and the lives of others. Dougl will be changed by his combat exper ence, but he can use it to better hi self and to ensure that he has a fulfi ing, happy and satisfying life.

LTC CHAD STORLIE, USAR
Omaha, Neb.

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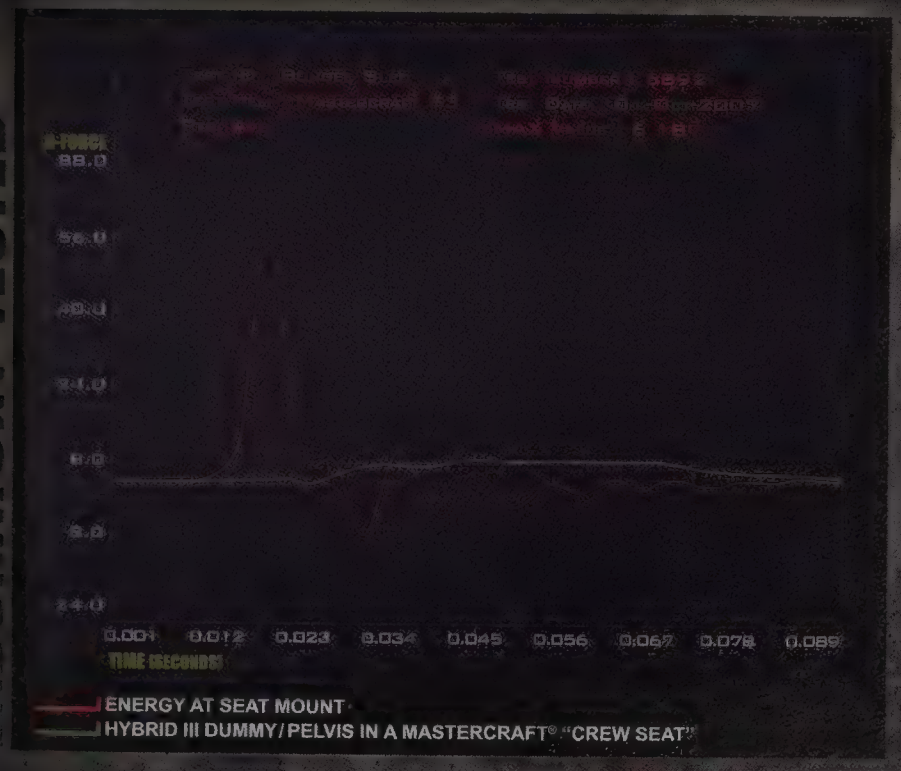
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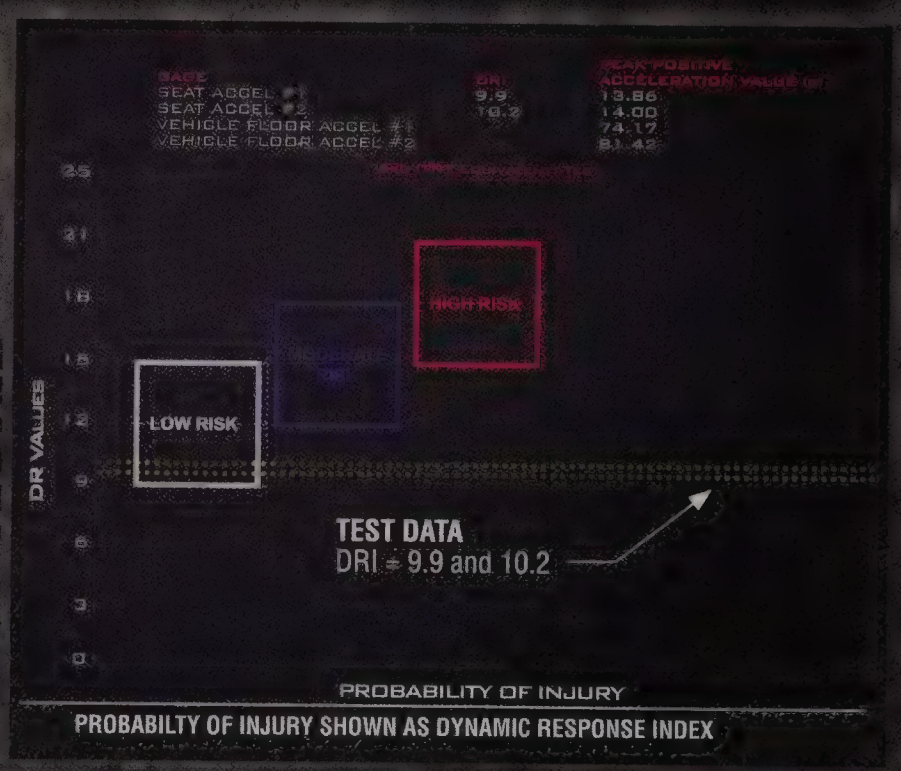
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Washington Report

President Obama Nominates MG Taluto To Head National Guard

President Barack Obama has nominated MG Joseph J. Taluto, adjutant general of the New York National Guard since 2006, as the director of the Army National Guard. If confirmed by the Senate for the three-star position overseeing more than 360,000 troops nationwide, MG Taluto will succeed LTG Clyde A. Vaughn, who recently retired. MG Taluto commanded the New York National Guard's 42nd Infantry Division in Iraq, and as commander of Task Force Liberty led some 23,000 troops, including two active Army units, responsible for four Iraqi provinces. He was commander of the Guard Joint task force that responded to the September 11, 2001 terrorist attacks on New York City.

The President also nominated Joseph Westphal, currently the chancellor of the University of Maine system, as Under Secretary of the Army. Westphal, a member of Obama's presidential transition team, was Assistant Secretary of the Army for Civil Works from 1998 to 2001 and briefly served as acting Secretary of the Army in the summer of 2001. If confirmed by the Senate, Westphal will replace Nelson M. Ford. (The Senate had yet to vote on either nomination when ARMY went to press.)

Other recent staff changes of note include BG Timothy J. Kadavy, adjutant general of the Nebraska National Guard, who was named the new deputy director of the Army National Guard. BG Kadavy deployed to Camp Victory, Iraq, in 2006 and, as the senior National Guard adviser to the corps commander, served as chief of the Reserve Component Support Division.

Thomas R. Lamont, who served as a Judge Advocate General in the Illinois Army National Guard for more than 25 years and retired as a colonel in 2007, was recently sworn in as Assistant Secretary of the Army for Manpower and Reserve Affairs. He will oversee the Army's civilian and military personnel interests for both active and reserve components.

Rep. Howard (Buck) McKeon (R-CA) has replaced Secretary of the Army nominee Rep. John McHugh (R-NY) as the ranking member (lead Republican) of the House Armed Services Committee. Rep. McKeon, whose congressional district includes Fort Irwin as well as military and aerospace manufacturers, has been a member of Congress since 1992 and a member of the House Armed Services Committee since 1995. Rep. John Carter (R-TX), whose congressional district includes Fort Hood, has replaced Rep. McHugh as Republican cochairman of the House Army Caucus. Rep. Carter is Secretary of the House Republican Conference and a member of the House Appropriations Committee; he also serves on the Military Construction and Veterans Affairs Subcommitee.

Oshkosh Wins M-ATV Contract. The Department of Defense awarded Oshkosh Corporation a $1.05 billion contract in late June to build and support more than 2,200 mine resistant ambush protected (MRAP) all-terrain vehicles (M-ATVs) for the Army. Oshkosh's armored fighting vehicle was selected after months of testing. By March 2010, DoD plans to purchase an additional 3,000 vehicles, contracts for which have not yet been awarded.

There are many MRAPs in Afghanistan, where they have withstood roadside bombs better than Humvees, but their use has been limited by the country's rugged terrain and lack of roads. Commanders in Afghanistan have requested a hybrid vehicle that is light enough to travel off-road but retains the V-shaped hull that provides protection from mine blasts beneath the vehicle. The M-ATVs can carry up to five soldiers, weigh less than 25,000 pounds and have an independent suspension system that allows them to travel off-road. The first M-ATVs are slated to begin fielding in Afghanistan in October.



AUSA honors legislators. *AUSA President GEN Gordon R. Sullivan, USA Ret., presented AUSA's Outstanding Legislator Award for 2009 to Sen. Jeff Sessions (R-AL) (center) and Sen. Carl Levin (D-MI) (right) in the Senate Dirksen Office Building in June. Sen. Levin, chairman of the Senate Armed Services Committee, and Sen. Sessions, who cosponsored the successful Army coin bill, were honored for their longtime and strong support of the Army.*

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News Call

GEN McChrystal Limits Use of Force

GEN Stanley A. McChrystal, commander of NATO's International Security Assistance Force (ISAF) and U.S. Forces Afghanistan, released a new tactical directive in July that emphasizes the importance of preventing civilian casualties. The directive, which updates a previous version issued by GEN David D. McKiernan in October 2008, advises "leaders at all levels to scrutinize and limit the use of force like close air support against residential compounds and other locations likely to produce civilian casualties."



U.S. Army

Soldiers from Bravo Battery, 4th Battalion, 25th Field Artillery Regiment, cross a creek during a dismounted patrol in the Nerkh Valley of Wardak Province, Afghanistan.

Although the document has been classified to protect Coalition forces, ISAF released portions of it in order to publicize the scope and intent of GEN McChrystal's direction. In any insurgency, he states, maintaining the support and will of the people "must b our overriding operational impera tive—and the ultimate objective every action we take." Commander may act in self-defense when the have no other options, but the use c air-to-ground munitions and indire fire against residential compounds i authorized only under limited an prescribed conditions; troops shoul remove themselves from the area they can.

The directive comes at a time whe American troops are moving again the Taliban in Afghanistan's souther Helmand Province and insurgent a tacks are increasing in several parts the country. In addition, presidenti elections are scheduled for August 2 and soldiers are checking the securi of polling stations. GEN McChryst acknowledges that limiting the use force entails risks to the troops, b maintains that "loss of popular su port will be decisive to either side this struggle. The Taliban cannot m tarily defeat us—but we can defe ourselves."

New Profile in Iraq. In accordance with the U.S.-Iraq Status of Forces Agreement, U.S. combat troops have withdrawn from Iraqi cities. Since January, the U.S. military has handed over or shut down more than 150 bases throughout Iraq.

In a Pentagon videoconference on June 30, GEN Raymond T. Odierno, commander of Multi-National Force-Iraq, told reporters that "a small number of U.S. forces will remain in cities to train, advise [and] coordinate with Iraqi security forces." Though pressed, he refused to quantify those troop numbe because the figure will change dai



An Iraqi soldier provides security during the transfer ceremony at Joint Security Station Oubaidy, in eastern Baghdad, from the 2nd Battalion, 505th Infantry Regiment, 3rd Brigade Combat Team, 82nd Airborne Division, to the Iraqi police.

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The United States will also support civil-capacity efforts in Iraq; 131,000 troops remain in the country.

With the drawdown of U.S. troops, the Iraqis have assumed responsibility for the security and stability of their country. GEN Odierno said he believes Iraqi forces are up to the challenge of protecting their cities. Outside the cities, with Iraqi approval, U.S. forces will establish a layer of defense in belts of territory that serve as support zones for insurgents—areas where they sometimes establish safe havens and sanctuaries to support urban operations. U.S. forces in those areas will inhibit insurgent movement. GEN Odierno said that Iran supports, funds and trains insurgents who operate inside Iraq, but operations in the belts and border areas have uncovered weapons caches and have made it harder for Iran to maintain the supply of weapons.

Many Iraqis fear that violence will escalate with the departure of U.S. troops; it has not increased across Iraq, however, according to GEN Odierno. He expects to complete an assessment of conditions sometime in mid-August, when he will determine any adjustments that need to be made. Enough U.S force—approximately 120,000 troops—will remain in Iraq to ensure successful national elections in January, after which the United States will draw down further.

GEN Odierno admitted there is concern that U.S. troops may become easier to target as they consolidate on bases. Just hours before the military completed its withdrawal from the cities, four soldiers were killed by a roadside bomb near Baghdad.

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from June 1 to June 30, 2009. All names have been released through the Department of Defense; families have been notified.

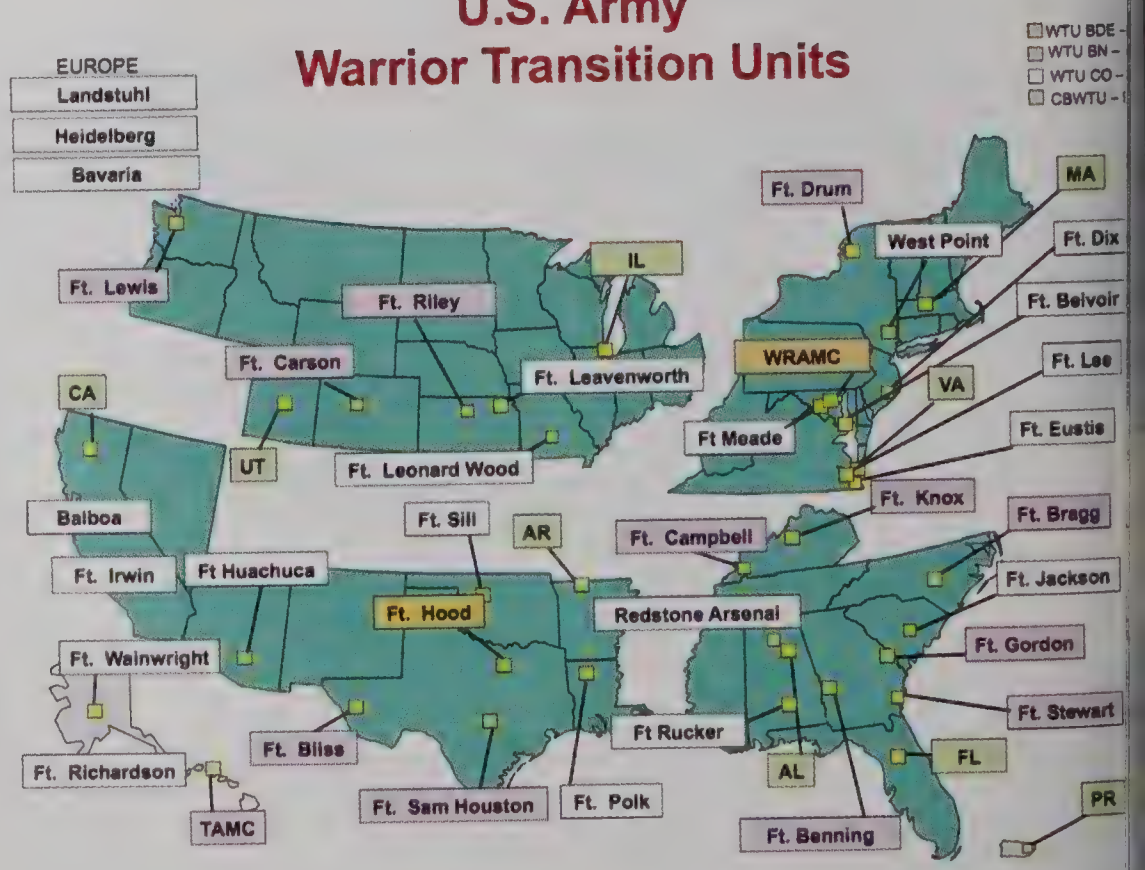
MAJ Rocco M. Barnes, 50
SSG John C. Beale, 39
1SG John D. Blair, 38
1LT Brian N. Bradshaw, 24
PFC Peter K. Cross, 20
PVT Steven T. Drees, 19
SFC Kevin A. Dupont, 52
SPC Jarrett P. Griemel, 20
SSG Jeffrey A. Hall, 28
SPC Roberto A. Hernandez II, 21
MAJ Kevin M. Jenrette, 37
SGT Ricky D. Jones, 26
SPC Jeffrey W. Jordan, 21
SGT Terry J. Lynch, 22
SSG Joshua A. Melton, 26
SPC Rodrigo A. Munguia Rivas, 27
SGT Jasper K. Obakrairur, 26
PFC Matthew D. Ogden, 33
SPC Jonathan C. O'Neill, 22
SPC Eduardo S. Silva, 25
SGT Paul G. Smith, 43
PFC Matthew W. Wilson, 19

Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from June 1 to June 30, 2009. All names have been released through the Department of Defense; families have been notified.

SGT Timothy A. David, 28
SGT Justin J. Duffy, 31
SPC Joshua L. Hazlewood, 22
SPC Casey L. Hills, 23
PVT Bradley W. Iorio, 19
SPC Chancellor A. Keesling, 25
SPC Christopher M. Kurth, 23
PVT Thomas E. Lee III, 20
SSG Edmond L. Lo, 23
SPC Charles D. Parrish, 23
SPC Marko M. Samson, 30
CPT Kafele H. Sims, 32
SGT Joshua W. Soto, 25
PFC Samuel D. Stone, 20

U.S. Army Warrior Transition Units

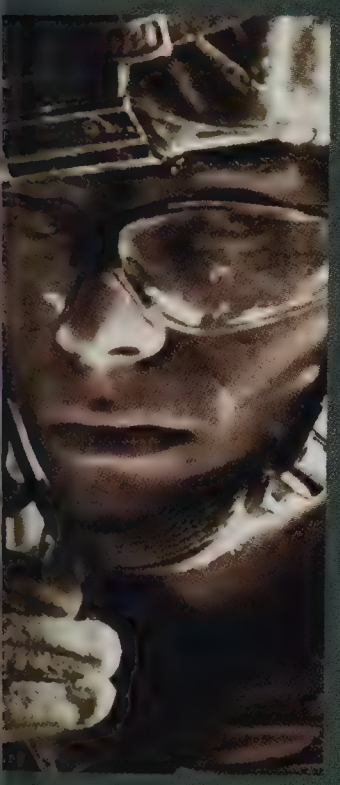


Fewer WTUs. *The declining number of soldiers assigned to Warrior Transition Units (WTUs) has prompted the Army to close the units at Fort Leavenworth, Kan., and Fort Rucker and Redstone Arsenal, Ala.; consolidate the one at Fort Lee, Va., with the WTU at Fort Eustis, Va.; and restructure the units at Fort Riley, Kan., Fort Lewis, Wash., and Fort Campbell, Ky., to accommodate lower projected populations.*

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GENERAL OFFICER CHANGES*



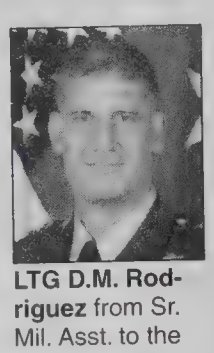
LTG M.D. Barbero from CG, USAIC and Fort Benning/ Comdt., USAIS, Fort Benning, Ga., to Cmdr., MNSTC-I and Cmdr., NTM-I, CENTCOM.



LTG R.W. Cone from Spec. Asst. to the CG, TRADOC, Fort Monroe, Va., to CG, III Corps and Fort Hood, Fort Hood, Texas.



LTG R. Lynch from CG, III Corps and Fort Hood to Asst. CoS for Installation Management/CG, IMCOM, Washington, D.C.



LTG D.M. Rodriguez from Sr. Mil. Asst. to the Secretary of Defense, OSD, Washington, D.C., to Dep. Cmdr., USF-A, OEF, Afghanistan.



MG M.T. Flynn from Dir. for Int., Jt. Staff (DIA), Washington, D.C., to Chief, CJ-2, ISAF, OEF.



MG D.B. Lacquement from CG, INSCOM, Fort Belvoir, Va., to Dep. Dir., Signals Intel. Directorate, NSA, Fort Meade, Md.



MG R.V. Mason from CG, 8th Theater Sustainment Cmd./CG, U.S. Army Hawaii, Fort Shafter, Hawaii, to Dep. CoS, G-4, FORSCOM, Fort McPherson, Ga.

Brigadier Generals: **J. Anderson** from Dep. CG, USAREC, Fort Knox, Ky., to CoS, MNF-I, OIF, Iraq; **T.A. Harvey** from Dep. Asst. CoS, C/J-4, UNC/CFC/USFK to CG, 19th Sustainment Cmd. (Expeditionary), Korea; **F.B. Hodges** from Dep. Chief, Legislative Liaison, OSA, Washington, D.C., to Dep. Cmdr.-Stability, RC(S), ISAF, OEF; **G.W. Ketchum,** ARNG, from Dep. Dir. for Ops., Readiness and Mobilization, ODCS, G-3/5/7, Washington, D.C., to Dir., J-7, Cmdr., Standing Jt. Forces Headquarters, SOUTHCOM, Miami, Fla.; **M.A. Legere** from Dep. CoS, Intel., MNF-I, OIF to CG, INSCOM; **X.P. Lobeto** from CG, 19th Sustainment Cmd. (Expeditionary), to Dep. CG, 1st Theater Sustainment Cmd., Camp Arifjan, Kuwait; **M.J. Terry** from CG, USASAC, Fort Belvoir to CG, 8th Theater Sustainment Cmd./CG, U.S. Army Hawaii; **C. Tucker** from PM, SANG, Saudi Arabia to CG, USASAC, Fort Belvoir; **F.D. Turner III** from Dep. Cmdr./CoS, USAAC, Fort Monroe, Va., to PM, SANG.

■ ***ARNG***—Army National Guard; ***CENTCOM***—U.S. Central Command; ***CFC***—Combined Forces Command; ***DIA***—Defense Intelligence Agency; ***FORSCOM***—U.S. Army Forces Command; ***IMCOM***—Installation Management Command; ***INSCOM***—U.S. Army Intelligence and Security Command; ***ISAF***—International Security Assistance Force; ***MNF-I***—Multi-National Force-Iraq; ***MNSTC-I***—Multi-National Security Transition Command-Iraq; ***NSA***—National Security Agency; ***NTM-I***—NATO Training Mission-Iraq; ***ODCS***—Office of the Deputy Chief of Staff; ***OEF***—Operation Enduring Freedom; ***OIF***—Operation Iraqi Freedom; ***OSA***—Office of the Secretary of the Army; ***OSD***—Office of the Secretary of Defense; ***PM***—Program Manager; ***RC(S)***—Regional Command South; ***SANG***—Saudi Arabian National Guard Modernization Program; ***SOUTHCOM***—U.S. Southern Command; ***TRADOC***—U.S. Army Training and Doctrine Command; ***UNC***—United Nations Command; ***USAAC***—U.S. Army Accessions Command; ***USAIC***—U.S. Army Infantry Center; ***USAIS***—U.S. Army Infantry School; ***USAREC***—U.S. Army Recruiting Command; ***USASAC***—U.S. Army Security Assistance Command; ***USF-A***—U.S. Forces-Afghanistan; ***USFK***—U.S. Forces Korea.

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

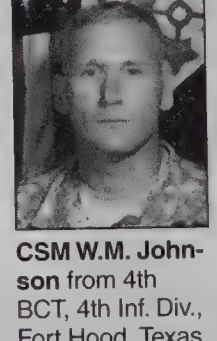
COMMAND SERGEANTS MAJOR CHANGES*



CSM J.T. Carr from 35th ADA Bde., Fort Bliss, Texas, to U.S. Army Air Defense School, Fort Bliss.



CSM R. Chandler from CSM, USASMA, Fort Bliss to Comdt., USASMA, Fort Bliss.



CSM W.M. Johnson from 4th BCT, 4th Inf. Div., Fort Hood, Texas, to 1st Armored Div., Germany.



CSM Iuniasolva T. Savusa from ISAF, Afghanistan, to PACOM, Hawaii.

■ ***ADA***—Air Defense Artillery; ***BCT***—Brigade Combat Team; ***PACOM***—U.S. Pacific Command; ***USASMA***—U.S. Army Sergeants Major Academy.

*Command sergeants major positions assigned to general officer commands.

NCO Takes Command. During a June ceremony at East Fort Bliss, Texas, CSM Raymond Chandler became the 19th commandant of the U.S. Army Sergeants Major Academy and the first enlisted soldier to hold that position since the school was established in 1972. CSM Chandler, who replaced COL Donald Gentry, was previously the academy's command sergeant major. COL Gentry will be the last officer to command the academy, the only school in the NCO Education System led by a commissioned officer.

GEN Martin E. Dempsey, commander of Training and Doctrine Command, made the decision to move to all-NCO leadership at the academy during the Army's Year of the NCO. A new system will be developed and implemented to select the academy's senior leader.

CSM Chandler, who entered the Army in 1981, has served in a variety of tank crewman and troop-leadi positions with armored cavalry re ments and heavy divisions and w previously the command sergeant n jor of the Armor School.

The Sergeants Major Acade which has been transforming for e past two years from an institution t trains to one that is focused more n education, has been seeking sugg tions for a new name from the N Corps. That name is expected to announced during the opening ce monies for Class 60 of the Sergea Major Course, which begins t month.

Tours in South Korea. U.S. Forces rea (USFK) commander GEN Wa (Skip) Sharp's implementation of a policy allowing longer, family-acc panied tours will nearly double number of servicemembers serving companied assignments on the Ko peninsula. In June, GEN Sharp said

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Carlton Wallace

WO1 Graduate. *Sons of (former SSG) Jonathan Holsey pin on his new WO1 rank at a Warrant Officer Career College (WOCC) graduation ceremony at Fort Rucker, Ala., in June. WO Holsey, whose left leg was amputated below the knee after an improvised explosive device exploded near his convoy in Iraq in 2004, is the first amputee to graduate from the WOCC.*

goal is to have one-half of the command's 28,500 members serve three-year accompanied tours. In the future, serving in South Korea, the largest Far East command, will be more like other overseas assignments.

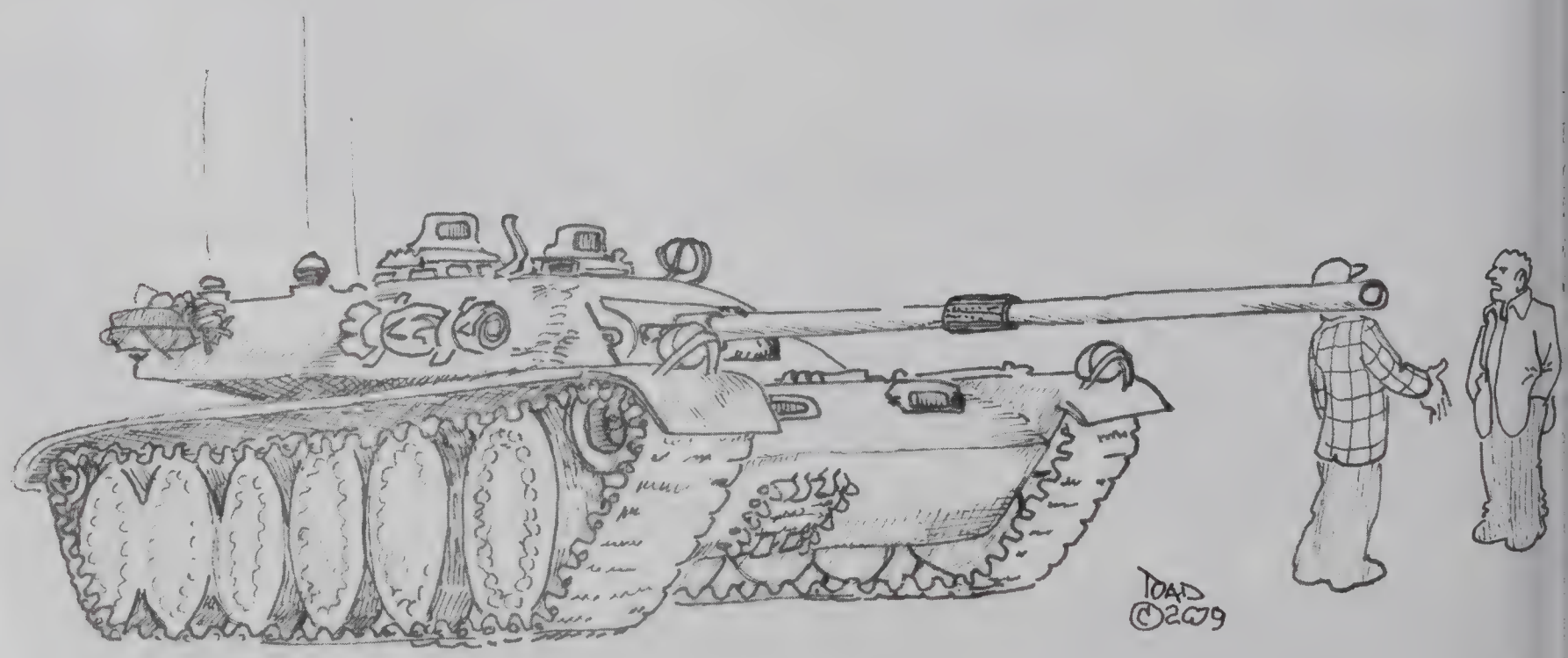
Now under way, the first phase of the expansion is designed to increase the number of accompanied assignments from 2,400 to 4,300 by early 2011. The second phase of the USFK move toward tour normalization is scheduled for 2011 to 2016. The expansion and associated construction to accommodate it will cost billions of dollars, with the expense being shared by the U.S. and South Korean governments. The first wave of newly command-sponsored families will arrive in South Korea this summer.

Despite the recent surge of provocations by North Korea, GEN Sharp still thinks it is a good time to bring families to South Korea. U.S. and South Korean forces did raise their levels of alert and surveillance in late June, however, when North Korea threatened the South with a possible military attack.

Soldiers heading to Korea need to know about new Army instructions on tour lengths and options for bringing families. For information, visit "Assignment Instructions to Korea" on Army Knowledge Online (www.army.mil/AKO/).

Transient Lodging Privatized. On August 15, the Army will transfer transient lodging accommodations at the first 10 installations under its privatization of Army lodging program. Soldiers in a temporary-duty or permanent-change-of-station status who need lodging will begin to see improvements at the following installations: Fort Rucker, Ala.; Forts Leavenworth and Riley, Kan.; Fort Polk, La.; Fort Sill, Okla.; Forts Hood and Sam Houston, Texas; Yuma Proving Ground, Ariz.; Fort Myer, Va.; and Fort Shafter/Tripler Army Medical Center, Hawaii.

Actus Lend Lease will redevelop the lodging facilities, and InterContinental Hotels Group (IHG) will assume lodging operations; 3,200 rooms at the 10 installations will be affected. The Actus/IHG team will convert five hotels—933 rooms—to Holiday Inn Expresses over the next two years and will renovate or replace the remainder over the next few years.



"The downside is the mileage. The upside is who cares?"

Front & Center

Training Full Spectrum: Less Is More

By GEN Peter W. Chiarelli

"Good leaders understand that they cannot train on everything; therefore, they focus on training the most important tasks. Leaders do not accept substandard performance in order to complete all tasks on the training schedule. Training a few tasks to standard is preferable to training more tasks below standard."

—Field Manual 7-0 *Training For Full Spectrum Operations*

Transformation is truly a never-ending journey. In the midst of fighting wo wars, the Army has organizationally recreated itself within a modular rmation and doctrinally grounded itlf in the capstone operational conpt of *full spectrum operations.*

Our combat leaders balance the robabilities of offense, defense and ability tasks within a shifting landape of nuanced transitions. Through e capturing and leveraging of experince, they have learned how to orchesate and dominate the human terrain much the same way we orchestrate nd dominate the physical terrain. ney are savvy in manipulating all the ements of national power—kinetic nd nonkinetic—and can recognize nd act upon shifts in the strategic enronment. They are versatile and ag-. Those in Iraq and in Afghanistan day find their formations involved in mbat operations for short, intense riods of time, but just as quickly can orient across the spectrum of nonkitic tasks to exploit created opportuties and keep the momentum.

It is an amazing transformation that s leveraged the experience of comt to compensate for the compressed riods of dwell time afforded by the mands of the nation and the finite source of Army forces. The Army's rce generation model (ARFORGEN) comes a different organizational fight home. ARFORGEN at the unit level becomes a cyclical endeavor to orchestrate and synchronize the flow of people and equipment with a training strategy that gives our soldiers and leaders the confidence in their capabilities, their equipment and their leaders.

As those leaders develop a training strategy, the debate that established a core mission-essential task list (C-METL) and directed mission-essential task list (D-METL) may have allowed the drift induced by eight years of war to distract us from fundamentals that have always defined our excellence in mission-focused training. Today a precise understanding of the true nature of the mission-essential task—balanced against full spectrum operations—is more important than ever. As GEN Martin E. Dempsey wrote in June's ARMY Magazine: "If we are true to our claim to be an expeditionary, campaign-quality, full spectrum force, then our METL is the constant and the conditions are the variable in our training and readiness reporting."

I cannot agree more. Our concept of a METL is the ultimate expression of commander's intent, and unfortunately the one resource we cannot buy more of is time. Field Manual (FM) 7-0 states clearly that "training a few tasks to standard is preferable to training more tasks below standard." Quality must override quantity. Though modern METLs are combinations of offense, defense and now stability, a balance must be achieved in which leaders have enough time to train their formations to standard rather than to time.

"To get harmony in music, each instrument must support the others. To get harmony in battle, each weapon must support the other. Team play wins."

—GEN George S. Patton Jr.

Complex operational environments over extended periods have led to an inevitable conclusion that must be recognized as we create unit training strategies. In a hybrid world, our adversaries will always *meet us where we are not*—both tactically and operationally. If you willingly accept this premise, then our ability to cut this Gordian knot lies in creating organizational agility, or rather the ability to rapidly assess, adjust to, orchestrate and synchronize kinetic and nonkinetic effects across the operational environment. To paraphrase GEN Patton's remarks: To achieve harmony in the full spectrum operating environment, each warfighting function and each element of national power must support another.

If the enemy is going to go where you are not, how can a leader say his force is ready if it is not trained to go where the enemy takes the fight? Col John Boyd knew this as he convinced the Air Force to create airframes with a higher thrust-to-weight ratio and taught pilots that winning meant anticipating and turning inside the enemy aircraft's abilities. It is simply impossible to plan and train for every possible scenario our soldiers and their leaders may encounter within the complex reality of the contemporary operating environments. The simple evolution of adversary ways and means and the rapid exponential growth and leveraging of technology are all telling us something if we just listen.

As a young major in the late 1980s, I had the privilege of resourcing and providing oversight to the U.S. Army's Canadian Army Trophy (CAT) team. It was a truly revealing experience watching an Armor company focus with an intensity and drive on a single task—platoon-level gunnery. They trained for a single battle run consisting of three defensive and two offensive engagements. A total of 32 main gun targets (with as few main gun rounds as possible, but no more than 40) and 20 machine-gun targets (with as few 7.62 rounds as possible but no more than 200)—that's all they trained for. They did not qualify or even carry their individual weapons. They con-

ducted no maneuver training. Their protective masks and general defense plan battle books stayed locked in storage. Through 18 months of complete mission focus, the unit eclipsed the competition and took home the trophy.

I thought I had learned a lot as I watched the unit train and come home victorious. Unbeknownst to me, the most important lesson revealed itself later. With little more than a month between the end of the CAT competition and an impending Combat Training Center rotation, the unit aggressively turned its focus and attention away from gunnery to mastering the tactical fundamentals each soldier would need for the upcoming rotation. With the steady pace of a team well trained in a few collective tasks, the CAT team leveraged the organizational dynamics and shorthand it had developed over 18 months of intense gunnery training to adapt to the emerging operating environment—in this case the Combat Training Center at Hohenfels, Germany.

The CAT team flat-out dominated the rotation. It was then that I realized a few mission-*essential* tasks by far exceeded the need to train for a whole lot of everything. The quality of a mission-essential training approach created the base mechanics by which the unit could adapt to the changing environment.

"Team play wins" is the confidence of good organizational dynamics that are on a bedrock of a few perfected mission-essential battle tasks creating the agility to proactively react and dominate transitions in the operating environment. Units that focus on fewer full spectrum battle tasks (that matriculate into a prioritized set of collective and individual tasks) build the individual, collective, and staff mechanics and dynamics needed to rapidly adjust and orchestrate within the complexity of contemporary operating environments, achieving Patton's "harmony."

We must refocus the *why* behind training and then integrate the cutting edges of learning theory and technology to the block and tackle of building a unit to fight and win. It is not just the building of skill sets, but also the human dimension of team mechanics and fundamentals that can adapt and orchestrate all the instruments of national power within the hybrid environments that demand full spectrum operations.

When the compression of time available between deployments begins to ease, the pressure to expand a commander's mission-essential task list will become apparent. But a mission-focused reevaluation of the anticipated operating environment, senior/junior leader dialogue and guidance, doctrine and orders should not result in more essential tasks, but rather a simple refinement tailored to the analysis and balanced to create unit agility and versatility.

As far back as 1963, GEN Bruce C Clarke figured out in *Guidelines for the Leader and the Commander* that "there is not enough time for the commander to do everything. Each commander will have to determine wisely what is essential and assign responsibilities for accomplishment. He should spend the remaining time on near-essentials." (Later this quotation would be the epigraph for the chapter on METL development in the 1988 version of FM 25-101 *Battle Focused Training*, a compendium to FM 25-100 *Training the Force*.)

Leaders have to maintain the discipline to identify and eliminate non-essentials that steal time required for training essentials. Army Chief of Staff GEN George W. Casey Jr. has given very definitive guidance: "We need to leverage the combat experience of our Army and think about what that means as we develop our training plans." And young leaders do just that—leveraging the experience in our mid-grade non-commissioned and commissioned officer corps as a risk-mitigation strategy during this era of decreased dwell time—senior leaders must counter the seemingly benign risk-mitigation stra



gy of trying to cover every possible ontingency with directed training asks that only create incredible turbu- ence at the unit level.

At the same time, we leaders cannot iscount the value of an individual eader's education and broadening ex- eriences to creating versatility. As a orce that is persistently committed, the rmy cannot in good conscience hold n to talent as a short-term risk-mitiga- on strategy in an era of persistent con- ict. Instead, we must take a cumula- ve, longitudinally broader view to- ards building a team of smart, tal- nted leaders who will see problems hrough different lenses because they ave had the time to reflect and expand n their experiences.

"Commanders develop their organization's mission-essential task list."

—Field Manual 7-0

Building unit agility and versatility omes from a focused approach to aining. The uncertainty and volatility f fighting in a hybrid environment de- ands that our leaders and their units evelop the capacity to "shift from a nown point." The known point be- omes the mission-focused attention to few tasks identified by a commander s *mission essential.* The harmony we esire in our formations within full ectrum operations and the ability to rn inside an adversary's decision cy- e are more a product of the quality of aining rather than the quantity. As an xpression of commander's intent, ETL-focused training creates teams at ultimately dominate the shifting mplexity of modern wars. □

EN Peter W. Chiarelli is the 32nd Vice Chief of Staff of the U.S. Army. His previous assignment was senior military assistant to the Secretary of Defense from March 2007 to August 2008. He commanded the 1st Cavalry Division during Operation Iraqi Freedom II, and he commanded Multi-National Corps-Iraq. This article appears on TRADOC's Combined Arms Center blog, posted June 30, 2009. You can access the Combined Arms Center blog at: http://usacac.leavenworth.army.mil/BLOG/.

The Army Is Too Small

By GEN Frederick J. Kroesen
U.S. Army retired

Any contention that the Army is too small generates both opposing views and questions about how large it should be and what structure is missing. We are told that today's technology reduces manpower requirements as technicians locate the enemy and employ remote, long-range firepower to destroy him. We are also told that if the Army were smaller, political leaders would not be so prone to employ it. And there are many articles that advocate a restructuring to fight today's threats and cope with the modern battlefield.

Having written on this subject quite regularly since the massive drawdown of our forces following the Persian Gulf War, I will not elaborate on my contention that armies win wars by occupying terrain and dominating populations, not by employing firepower. And I will not offer specific size and structure recommendations, believing that the Office of the Army Chief of Staff is the only place such determinations can be made.

So many factors affect requirements, capabilities, resource availability, and the priorities of current missions and foreseen developments that any outsider's guesswork has to be suspect—if not just plain wrong. I will accept the answers provided by the Army force generation system if it identifies actual requirements before they are adulterated by limitations, assumptions and budget projections.

Nevertheless, a review of force-development history from the Vietnam War era on might provide thoughts useful to today's deliberations and the argument for a greater Army. We began the war era with 16 divisions—a 960,000 end strength—and peaked at 19 divisions and 1.5 million soldiers in the active force. We ended with an

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Army in shambles because of mismanaged personnel policies and programming and budgeting that annually projected peace in the coming year.

A typical and too-rapid reduction of that force followed, arrested by GEN Creighton Abrams, then Chief of Staff, who brokered what was to be a constant end strength of 785,000 and 16 divisions, three of which would have reserve component "round-out brigades." That constancy continued until the Cold War ended with the collapse of the Soviet Union and the Warsaw Pact. It is important to note that the 785,000 end strength was maintained as an all-volunteer force that produced the nonpareil Army that conducted Operations Just Cause and Desert Storm, campaigns that will be paradigms for study for years to come.

The first Bush administration programmed the "peace dividend" Army of 12 divisions and 535,000 soldiers, with comparable reductions in the National Guard and Army Reserve. (The Army had recommended a strength of about 650,000.) Very shortly the Clinton administration reduced the force to 10 divisions and 495,000, then whittled it to 485,000. When we began the war on terrorism, authorized end strength was 480,000. Seven years later, with unit rotations into the combat arenas exceeding the time these same units were spending recuperating, the Army was allowed to grow to its current authorization of 547,000. Significantly, the expansion was achieved after critics expressed doubt that it could ever be accomplished.

More significantly, during the same seven years, the Army contracted for thousands of people to perform tasks and missions essential to the war effort because it did not have the units or uniformed manpower needed. That number—coupled with the mobilization of reserve component units, still numbering almost 100,000, and now employed regularly at an operational tempo never before contemplated—provides a measurement of how much too small the Army has been and is today.

The force of 547,000 active, 100,000 reserve components and an estimated 200,000 contract personnel provide a total committed force that continues to demand one year in combat after only one year of recovery and preparation to return. Withdrawing from Iraq while reinforcing in Afghanistan is no promise of a reduction in demand. Pursuing that scenario and other known missions and being pre pared for an unknown contingency (perhaps a response to the North Ko rean announcement that the cease-fir is over) with the current Army ap pears a questionable choice, perhap even portending real deterioration i the qualities and capabilities of th force.

Continuing the current end strengt is a political decision made by thos properly empowered to make it. It ap pears, however, to be based on hope– hope that the demands of our wa will be alleviated soon, hope that ou career soldiers will continue to serv and hope that today's equipment ca be maintained in combat-effective co dition. But hope is the weakest of reec on which to bet our future. Our alte native seems limited to employir more hope that Congress, wherein li the responsibility for raising the Arm will understand the need for son stimulus money to provide milita adequacy. The numbers 650, 785 or 9 are perhaps not ones appropriate f today's needs, but neither is 547.

*GEN **Frederick J. Kroesen**, USA Ret., a former commander in chief of U Army Europe and a senior fellow AUSA's Institute of Land Warfare.*

The Unlearning We Must Do

By LTG James M. Dubik
U.S. Army retired

Unlearning is one of the hardest of human activities—hard enough intellectually, even harder organizationally. Some view the 9/11 attack on the United States not just as a surprise attack, but also as a break from the past. From this perspective, everything changed on that September day. For others, however, this attack was the most lethal "data point" among a series of unfolding realities described by various writers for almost two decades.

Beginning in the late 1980s/early 1990s—in books, articles, essays, monographs, pamphlets, speeches, briefings, and a host of other official and unofficial media—a number of military and civilian strategists around the world described how much the strategic environment had changed—and was changing—as the result of two megatrends: the end of the bipolar Cold War world and the emergence of the Information Age and globalization. These authors and thinkers described changes in geopolitical conditions, socioeconomic conditions, and demographic and climatic conditions. They also described the unsettling effects of an accelerated pace of technological change and of the disintegrative effects that globalization would have on an already hyperchanging situation. Some even suggested that the very concept of war was expanding. In addition to a future that would include war as it was commonly und stood—conventional combat betwe nations—the future would invo new varieties of war conducted non-nation-state entities and un politically ambiguous conditions. of these factors, and others, would sult in a period of instability, lead to creases in conflict, erode our concep sovereignty, challenge the interests the United States in new ways, a how military force would be used, a expand the need for more useful a effective methods in employing nonmilitary elements of U.S. natio power as well as for methods to i grate such power among nations.

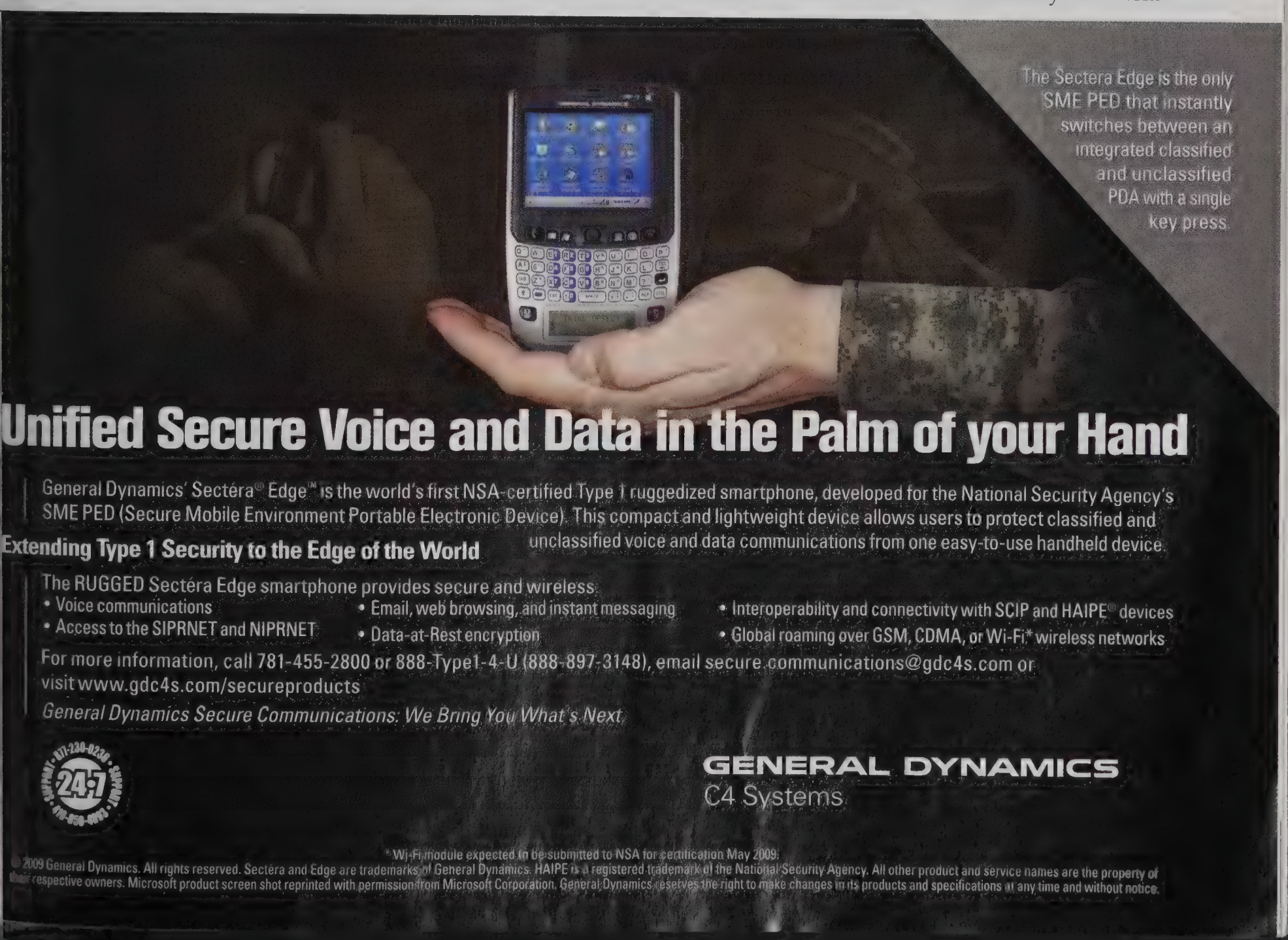
In the same 20-year period, the erational use of U.S. military forces creased significantly and in ever

ferent circumstances and purposes—n Panama, the Gulf War, Somalia, Haiti, Bosnia, Kosovo and the Philippines, among others. And while nearly a decade has passed since the 9/11 attacks, many still don't appreciate the organizational implications of our strategic environment. The record of U.S. adaptation to the unfolding and changing strategic environment as well as to the global war we are fighting has been mixed at best.

We can point to some tactical, materiel and doctrinal innovations; to changes in some military organizations and acquisition programs; and to somewhat improved intelligence integration and information sharing. These changes are marginal, however. President Obama's speech in Cairo in June acknowledged the gap between what we have done and have yet to do, between applying lessons learned and how much we still have to unlearn.

The President called for a new beginning in seven areas: how we confront violent extremism; discuss the situation among the Israelis, Palestinians and the Arab world; address nuclear proliferation; help governments better reflect the will of their people within the context of their traditions and culture; help people in every country become free to choose the way they live their faith; improve opportunities for women; and expand economic development and human progress without risking control over what a nation or a people may cherish most. Each reflects the fact that the United States, its allies and other partners must craft a global counterinsurgency strategy that uses the nonkinetic elements of national and international power to provide the context within which kinetic force against violent extremism fits. Viewed from a nation (and a world) at war, the President's call is for more than increased humanitarian aid programs in education, economic development, scientific cooperation, technological innovation and improvements in a government's attentiveness to its citizenry. Indeed, these very programs can help eradicate the conditions that make al Qaeda and affiliates an appealing alternative to the status quo. President Obama's call is yet one more data point reflecting how much the strategic landscape has changed and signifying the need to adapt our approach to national security.

Will his call, however, be any more effective in terms of the organizational changes many have long recognized, called for and attempted to produce? Will the President's call help increase the effectiveness of the nonmilitary elements of U.S. national power? Many, but not all, of the programs outlined by the President will fall to the U.S. State Department to plan and execute. Others will fall to nongovernmental organizations (NGOs) or other U.S. departments. But aid projects—whether executed by nations or NGOs—are not ends in themselves, nor should they be. Rather, they are means to stimulate an indigenous ability to provide public goods and services to all sectors of a nation's citizenry on a rela-



tively equitable and transparent basis through that nation's ministries. The United States will have to develop long-term, multidepartment campaigns for each specific country, and perhaps within regions, to ensure that the tactical actions of individual aid projects achieve U.S. strategic aims. Furthermore, to translate plans into action, some organization must be held responsible for "output-focused" managerial control. Will the State Department reinvent the role of ambassadors and their embassy teams to become much more operationally focused? Will the United States give its ambassadors the mandate not just to be aware of what each of the U.S. agencies is doing within a country, but to provide direction and management? Will ambassadors have directive authority? Can our diplomatic corps unlearn current ways of doing business fast enough to make the President's vision a reality? Who, if not the Department of State, will receive the mandate to orchestrate the variety of programs of which the President spoke? Or will the President's call help shape or create new and more effective multinational coordination?

The programs described by the President will die like other calls to change unless the tactical actions of aid programs—individual projects—are used to strengthen the assisted nation's ministerial capacity and are part of a coherent campaign plan linked to a global strategy, which will require not just a level of coordination among U.S. departments heretofore unrealized, but also coordination among a global set of partners—national, international and nongovernmental. What is the organizational mechanism through which such coordination will occur? It will have to be created, or an existing mechanism significantly altered.

No Quadrennial Defense Review since 9/11 has been able to achieve the unlearning necessary to shift service program-centric behaviors sufficiently. Perhaps the Secretary of Defense's recent budget announcements will be successful, but unlearning our bias for overly expensive, highly technological solutions will be difficult, to say the least.

Will the President's call result in better coordination across U.S. combatant commands as well as closer military/diplomatic coordination? Our enemies do not recognize the military boundaries we draw. Our enemies recruit, plan, prepare and execute operations, and they raise resources around the globe. The Army is organized around multiple combat command areas of responsibility. Such an organization is understandable and works, if the coordination, flow of information and execution of our operations all occur easily across combatant command boundaries. When it does, is it driven by personalities or institutional adaptation? The history of warfare is replete with enemies exploiting boundaries of every type; al Qaeda and its affiliates are no different in this regard.

Equally important, the nonkinetic actions outlined in the President's speech in Cairo must be coordinated with kinetic actions. In fact, to achieve maximum effectiveness, kinetic operations should be fully synchronized with and subordinate to nonkinetic elements. Yet the organizational means by which we plan, coordinate, prepare and execute synchronized nonkinetic and kinetic operations within the United States, let alone among our allies, is still uninformed at best.

War has proven to be the chameleon that Clausewitz described. This war is being waged by a non-nation-state. It is not an overstatement to say that our defense establishment and overall security architecture is based upon the assumption that wars are an exclusive matter of nation-states and that war admits to distinct phases: precombat, combat and postcombat. Can we unlearn this dogma so that we can see more clearly what we must do? Should we depart from our Korean and Vietnam experience of conducting war without declaring it? Perhaps a debate over a declaration of war would help clarify the status of belligerents, identify changes to international conventions necessary in a war declared and waged by a non-nation-state, and provide insight into the kinds of international forums we would have to create to orchestrate collective action. Such a debate might even facilitate a discussion concerning how we must adapt our approaches to using the "forces" and all elements of power to match changes beyond this war.

The President's Cairo speech identified what 9/11 revealed: a new strategic environment that requires significant intellectual change and organi-



"A new strategic weapon."

tional adaptation in the ways the United States conceives of "national security," the new types of "forces" necessary to secure our interests and protect our citizens, and the national and global procedures needed to orchestrate those "forces." Many strategic leaders have tried to effect the necessary changes, and some have been successful. Our national reaction to date, however, has been mixed: a combination of a few innovations with mostly modifications to existing methods. Nearly 10 years of war, as well as contingencies we cannot foresee, suggest that something more is required. The new beginning that the President called for is also a call for unlearning. The new strategic realities we face require more change than we have been willing, so far, to bring upon ourselves. □

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FCS Termination May Be A Blessing In Disguise

By Richard Hart Sinnreich

As most readers will recall, in May, Defense Secretary Robert Gates announced that he was terminating the vehicular portion of the Army's Future Combat System (FCS) development program. While we in the Lawton-Fort Sill, Okla., community understandably are disappointed by the potential cancellation of the non-line-of-sight cannon (NLOS-C) that was to have been assembled in Elgin—potential rather than certain only because Congress hasn't yet spoken—from a broader military perspective, the demise of FCS may ultimately turn out to be a blessing. To understand why requires recalling the program's origins.

FCS was the product of one reality and two beliefs. The reality was the growing obsolescence of the Army's heavy combat systems. The Abrams main battle tank and Bradley fighting vehicle, for example, were initially fielded in the 1980s. While both remain among the best of their kind, even great weapons wear out, and their designs are becoming increasingly outdated. Other current weapons are even older. Today's Paladin self-propelled howitzer, for example, is the product-improved platform of a cannon first fielded in the 1960s, with capabilities long since surpassed by foreign competitors.

That all these systems eventually must be updated wasn't seriously disputed. Neither was the belief that the Army's capabilities were dangerously bifurcated between heavy armor that could maneuver and survive on any battlefield but could be deployed only by sea and required a large sustainment tail, and lighter formations that

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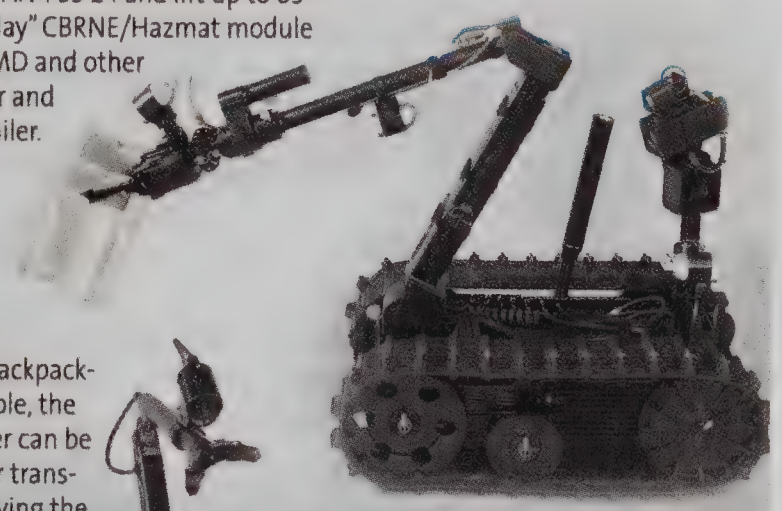
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could deploy by air with relatively austere sustaining support but lacked the protected mobility to fight modern mechanized forces once they arrived.

The Army began closing that gap early in the decade, initially with light armored vehicles borrowed from the Marine Corps and subsequently with "medium-weight" formations built around the air-transportable Stryker wheeled armored personnel carrier. But Stryker was intended to supplement the Army's heavy armored vehicles, not replace them.

That was to be the role of FCS, a family of air-deployable combat vehicles, robotic platforms and advanced sensor systems whose survival would depend on early warning rather than armor. The belief that information could replace armor was debatable from the outset, and events since only have deepened that skepticism, although involving much weaker threats than those FCS was originally designed to defeat.

Indeed, Canadian troops confronting the Taliban in Afghanistan's Kandahar Province have warned their U.S. counterparts scheduled to "surge" into neighboring Helmand Province to bring tanks. As one Canadian officer commented laconically to reporters, "Go big or stay home."

Given its price tag, continuing doubt about its technical feasibility and tactical rationale, and changes in the threat landscape, Secretary Gates' reluctance to stick with FCS in its current form is no surprise. In May, the Army announced that it will rethink its combat vehicle requirements. Meanwhile, surviving components of the FCS program, chiefly advanced air and ground sensor systems, will be deployed to all 73 of the Army's brigade combat teams, instead of just the 15 FCS brigades for which they originally were destined.

That may turn out to be a blessing on several counts. To begin with, it will save on the order of $80 billion, money badly needed to refurbish tanks, trucks, artillery, helicopters and other equipment increasingly worn out by eight continuous years of warfare in very harsh environments.

Distributing FCS components such as small unmanned aerial vehicles that already are proving their worth to all of the Army's fighting brigades rather than just a subset also makes great sense. Indeed, it could be argued that, given current threats, light- and medium-weight units are in greater need of such advanced capabilities than are the more intrinsically survivable heavy formations that FCS originally was intended to supplant.

Finally, freed of the increasingly ur sustainable burden of defending a de velopmental system in which eve many of its own people never entirel believed, the Army now has a chanc to rethink its ground combat requir ments from scratch and in the proce arrive at a more realistic and achie able balance between armor and i formation, deployability and sustai ability, and cost and effectiveness.

None of this will assuage the regr of those who were looking forward the jobs and payroll that NLOS would bring to the area. And it wo immediately repair an artillery capab ity deficit that most agree already h persisted for much too long.

But, like its maneuver brethren, t day's artillery can manage today threats, even if less effectively and mo expensively than we might wish. T real problem will be coping with t morrow's. If rethinking FCS makes th more likely, so much the better.

Richard Hart Sinnreich writes for T Lawton *(Okla.)* Sunday Consti tion. *This article originally appeared the May 24, 2009* Lawton Consti tion *and is reprinted by permissio the author.*

'An Army at the Crossroads'—A Counterview

By LTG Michael A. Vane and COL John A. Bonin, U.S. Army retired

During a November 2008 visit to the 1st Cavalry Division, Fort Hood, Texas, Army Chief of Staff GEN George W. Casey Jr. provided his perspective on the Army's frequent deployments to Iraq and Afghanistan. He said:

> The Army is out of balance. We're deploying at a rate that we can't sustain … The only way to getting back in balance is increasing dwell time—the time a soldier spends back at home … It's not just so they can spend more time with families, it's so they can recover themselves, and it's also [so] they can begin training to do other things … If the Army continues at the pace it is deploying, while simultaneously increasing overall troop strength, then the dwell time back home will increase from one year to 18 months, or longer, before redeployment.

GEN Casey's words highlight the current state of affairs. The U.S. Army, though filled with battle-hardened and field-tested soldiers, is a force that is out of balance, frequently away from home, experiencing limited capacity to reset and is overstretched.

Think tanks and defense intellectuals have taken this news as an opportunity to advocate a number of key strategic decisions to be made by the new administration. One particular white paper entitled "Strategy for the Long Haul: An Army at the Cro roads," written by Andrew F. K pinevich, president of the Center Strategic and Budgetary Assessme (CSBA), makes very specific high- recommendations for the U.S. Arm

In "An Army at the Crossroa Krepinevich argues for a reductio the size of the Army. Specifically recommends that the Army: reduc approved end strength of 547,000 65,000 soldiers; create a standing A advisory capability that can be ploved on short notice; reduce high-end conventional capability f 48 active and 28 reserve compo brigade combat teams (BCTs) to 4 tive and 25 reserve component B

ıove two heavy BCTs from the active ɔmponent to the National Guard; and ɔnvert 15 Infantry brigade combat ams and 15 National Guard BCTs to edicated "security cooperation" (SC) CTs to create a "dual surge" capabil-y. By doing so, the Army would then eld two completely separate forces: ıe only for conventional operations ıd one only for irregular warfare or ability operations.

Although these recommendations are focused on preparing for nerging security cooperation and as-stance tasks, they do not take into count an Army that has task-ganized BCTs to accomplish these sks while fully employed, decisively ıgaged and unable to meet all the mmitments of the national defense rategy without reaching the current proved increase in end strength. ıe Army provides expertise in close mbat while fulfilling security force sistance responsibilities. Surely the my approach achieves more effec-eness in all environments requiring on-call capability for close combat d more efficiency with BCTs aug-ented with the right skills. In fact, e recommendations appear to call r splitting the Army into two forces, uch like Thomas P.M. Barnett de-ibes in his book *The Pentagon's New ap*. More importantly, Krepinevich ay not be aware of the numerous itiatives that the Army is already dertaking to improve security co-eration and assistance in today's erating environment.

The CSBA's call for the creation of o separate armies, one conventional d the other focused on irregular rfare, is an interesting notion. The w Army field manual, FM 3-0 *Oper-ons*, states that soldiers need to be pable of conducting offense, de-ıse and stability tasks simultane-sly. During any particular opera-n, the mission may shift from acking a position to defending one, d then potentially to securing the pulation and building basic ser-es and infrastructure. This plurality missions in a complex environment s been one of the key challenges in Iraq. Yet GEN David H. Petraeus' command philosophy and actions on the ground clearly demonstrated that an all-volunteer professional force of combat-experienced soldiers can be capable of performing three tasks simultaneously. Some specialized expertise may be needed in an advisory capacity to augment the broader knowledge set needed for stability operations. Nonetheless, the vast majority of our ground troops have been and are continuing to execute multiple complex tasks quite effectively.

The CSBA advocates the creation of 15 active Army and 15 National Guard security cooperation BCTs, yet it does not clearly describe what tasks these units would be capable of performing. Would these SC BCTs be capable of conducting both offensive and defensive operations if required? We must realize that the enemy gets a vote on which type of operations we must execute. Would forming SC BCTs be the best use of almost half of the nation's limited numbers of Army maneuver forces? In addition, American ambassadors are unlikely to want any civil-military capability in a benign environment. The Army has already proven its capability to provide small teams of expertise when needed and has done so for disaster relief.

The Army considered the advantages of creating small, permanent training assistance teams, but chose to develop and maintain the training base capability and capacity to generate teams over extended periods of time. This decision allows the Army to expand when required, to meet capacity gaps that special operations forces (SOF) could not address and to provide capabilities for which SOF lack core competencies. This methodology has provided teams that are proving effective in Iraq and Afghanistan while retaining sufficient structure to meet operational requirements across the spectrum of conflict—using some 5,000 personnel trained for their specific tasks. Teams can be created by either individual wartime augmentation or assigning a directed mission to a unit as part of its deployment preparation.

Although having a standing pool of teams initially appears attractive, as Krepinevich argues, the quantity required to meet and sustain these teams on a rotational basis would degrade the Army's flexibility. It would create a greater number of specialized units that would have limited qualifications and limited utility to meet the Army's needs. In many ways, the call for more hyperspecialized forces appears to be "fighting the last war" rather than preparing for the future. We can more effectively meet this need by augmenting units with required skills.

Facts on the ground do matter. "An Army at the Crossroads" is not entirely accurate in its portrayal of the units of the Army's modular force. In its depiction of the pre-modular force, CSBA claims that the modular force reduced the Army by roughly 30 percent. What the CSBA report does not take into account is that more than half of the 233 maneuver battalions (125) were Army National Guard battalions in the "strategic reserve" and were not fully manned or equipped in 2004. The tiered readiness of these units mandated extensive time and funds to bring them up to deployable levels. With the Army's transition to a sustained operational wartime footing, all units, active and reserve, are being organized into fully capable deployable units, and thus the revised Army modular force has become a much more combat-ready force.

While nothing is ever close to perfect, the success of our land operations shows that modular formations are passing their tests. To a large degree, the development of the modular force is a challenge to the notion of the bifurcated force (part conventional, part irregular). By design, the modular force solutions strategically tailor and tactically task-organize brigade combat teams with appropriate enablers according to the mission, operational circumstances and the conditions of the region. In essence, the modular force is conditions-based. For extended stability operations, BCTs receive augmentation in terms of military police, civil affairs units, human intelligence teams, psychological operations, construction

engineers and trained advisory teams. For high-intensity offensive and defensive operations, the augmentation could include additional artillery, air defense, chemical detection and decontamination, assault engineers and mobile logistics capacity. The challenge today is not only to have sufficient numbers of BCTs with selected organic units in the base organizations for full spectrum operations, but to have sufficient numbers and types of modular enablers to help tailor BCTs dependent on their conditions-based missions. In sum, the modular force is a more effective and appropriate response to the complex, hybrid challenges of irregular warfare and conventional operations than a bifurcated Army.

"An Army at the Crossroads" subtly argues that the primary reason the Army has had some "worrisome" manpower trends is because of the approved growth. Krepinevich acknowledges the stress on Army personnel as a result of the current conflicts. He also acknowledges the use of thousands of personnel from sister services in lieu of soldiers and the reliance on contractors "to make up for the shortage of soldiers." Currently, the Air Force provides nearly 5,000 personnel to support stability tasks, and the Navy provides more than 6,500 for similar missions. The Army recently surpassed its 547,000 end-strength goal, however, and an explanation of how these problems will be ameliorated by a smaller Army is not provided. The paper appears to argue that the current shortages of noncommissioned and commissioned officers would be solved merely by returning to a smaller force. That smaller force, however, would increase the stress on the remaining soldiers and their families, reducing promotion prospects for this very experienced Army, which could result in even greater attrition of the Army's best.

As GEN Casey stated, we need a balanced force structure with agility. Our Army cannot overstructure BCTs to the detriment of specialized enablers, and these enablers may need focused training similar to that of BCTs. Hence, the security cooperatio BCT could be a regular BCT selecte for a directed mission in its Arm force generation cycle. It would be ta lored with specialized teams from th Army force pool and provided specia ized training including language an cultural assistance from a dedicate security cooperation detachment a signed to the respective theater arm for the area of responsibility. The sec rity cooperation BCT could be dec cated to the combatant commander f a definite period (six months to year). Certain designated BCTs wou conduct this mission repeatedly, su as those assigned to the European th ater. All BCTs, however, need to be c pable of possessing equal utility in s bility operations, irregular warfare conventional operations to provide t full spectrum force the nation needs.

Few can forecast the future wi precision. Our nation's history flects that we do not have a recc of always "getting it right," so cr Army should be careful when t comes to accepting unnecessary ri reducing force structure prematur and assuming the prevalence of a versaries scaled to fit the CBSA "d l surge" concept. Versatile and ag units serve as the best solution for u certainty, not too much specializati What the nation needs is an Army d equately sized for its tasks with e flexible force structure and ope tional agility that the modular fo and the Army's doctrine provide.

LTG Michael A. Vane is the deputy c manding general, Futures, and direc Army Capabilities Integration Cen A graduate of the U.S. Military A emy (USMA), he has a master's joint command, control and comm cations from the Naval Postgradu School, and is a U.S. Army War ol lege graduate. COL John A. Bo USA Ret., is the professor for Conc and Doctrine at the U.S. Army College. A USMA and U.S. Army College graduate, he has a master military history from Duke Unive and a doctorate in military history Temple University.

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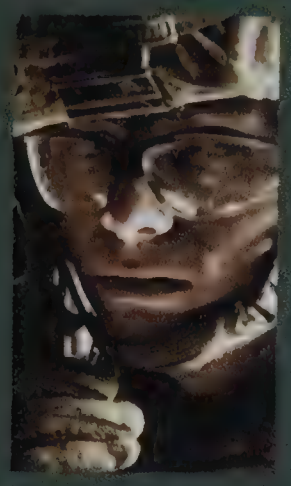
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GREEN WARRIORS: ENVIRONMENTAL OPPORTUNITIES IN CONTINGENCY OPERATIONS

By David E. Mosher
and
Beth Lachman



MAJ Andrew Attar, joint project management officer, 2nd Heavy Brigade Combat Team, 1st Infantry Division, Multi-National Division—Baghdad, inspects the newly installed solar panels on the roof of the Dahkel Clinic in the Hurriyah neighborhood of northwest Baghdad.

Operations in Iraq and Afghanistan have brought home the lesson that paying attention to environmental issues in contingency operations can help the Army meet mission objectives and achieve national goals for the operation. Careful management of environmental issues can also protect soldier's health; reduce logistic burdens, costs and potential liabilities; and improve relations with the local populace. Sustainability can be used as an organizing principle to help the Army take advantage

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SPC Jacob Morris constructs a covering for Combat Outpost Penich's new water pump as construction at the six-month-old base in Afghanistan's Kunar Province neared completion in July.

environmental opportunities and minimize costs and risks.

Focusing on environmental issues only during stability and reconstruction operations is not enough, however; they must be considered by commanders, planners and soldiers and assessed in the context of the national goals the United States has for the contingency operation before it even starts. As the new Army Field Manual (FM) 3-0 *Operations* reminds us, "operations conducted during one phase of a campaign or major operation directly affect subsequent phases." This suggests that environmental issues should be considered in all aspects of a contingency operation, including planning, combat operations, stability and reconstruction operations, logistics, and the siting, design and management of base camps.

Although soldiers may find trash in the streets and polluted waters in countries in which they operate, this does not mean that the locals do not care about the environment. In fact, the opposite is often true: Their concerns about the environment run very deep, to the essence of what humans need to survive and avoid disease—drinkable water, basic sanitation and viable farmlands. A family that doesn't have to worry about whether their water source will sicken their children will be more inclined to support the government that U.S. forces are supporti The Army's counterinsurgency manual, FM 3-24, sta that providing essential services is one of the central li of operation for gaining support of the population.

Experience supports this finding. During his comma of the 1st Cavalry Division in Baghdad in 2004–05, th MG Peter Chiarelli (currently the Army's Vice Chief Staff) found that attacks on his soldiers were reduced the sections of Baghdad where U.S. forces had addres to some degree sewage, water, electricity and trash (SW problems. Addressing SWET issues was important for fence-sitters who had not yet decided whether to supp



The U.S. Army Garrison Bamberg, Germany, recycling center is open 24 hours, seven days a week.

***David E. Mosher** is a senior policy analyst at the RAND Corporation, a nonprofit research organization that supports the Army through its Arroyo Center. **Beth Lachman** is a senior operations researcher at RAND. This article was adapted from the RAND study* Green Warriors: Army Environmental Considerations for Contingency Operations from Planning through Post-Conflict, *available at www.rand.org.*



U.S. Army Environmental Command/Neal Snyder

A worker moves and stacks steel cans collected for recycling at the Fort Jackson, S.C., recycling center.

he new government or the insurgency. A battalion commander who was responsible for reconstruction in Sadr City a few years later found that his soldiers were not attacked in neighborhoods where the battalion had ongoing or completed reconstruction projects.

Polling done in Iraq also supports this: SWET consistently ranks at the top of Iraqi concerns, after security. A poll done for RAND across Iraq in February 2005 showed that clean water and sewage/wastewater treatment top the list of environmental concerns. Results were largely consistent for urban and rural Iraqis and across ethnic and religious groups.

Soldiers have been actively involved in reconstruction projects that address these issues, building sewage treatment plants in Iraq, digging wells in Afghan villages, and restoring the Mesopotamian wetlands that have been the lifeblood of the "marsh Arabs" and a critical habitat for fish and wildlife. Soldiers have also taken steps to improve environmental infrastructure in the Balkans. The benefits of preserving or rebuilding these infrastructures can be high, particularly in operations for which gaining the support of the populace and helping stabilize the country is important.



U.S. Army

Students of the Electrical Line Refurbishment Team course in Tarmiyah demonstrate their new repair skills in a U.S.-funded bucket truck. Twenty students graduated the six-week class, which gave them skills needed to work on electrical infrastructure repairs in Iraq.

Although environmental issues can play an important role in achieving mission success, there are many other reasons for leaders and soldiers to pay attention to them. Soldier health and safety are the most fundamental: If a base camp is placed in a contaminated area or one with endemic disease, soldiers can become ill, which can obviously affect unit readiness. In Bosnia, a base camp had to be moved because it was located between a cement plant and a caustic soda plant. Under certain conditions, the effluents from the factory stacks mixed, creating a caustic ash that peeled paint off vehicles and sent some soldiers to the clinic. In Afghanistan, soldiers were sheltered in old Soviet aircraft hangars. When these structures were heated, aircraft oil, lubricants and cleaning substances embedded in the joints and cracks of the hangars vaporized and formed noxious vapors, inducing respiratory problems for the soldiers billeted there. While much progress has been made to correct these practices, more specific procedures need to be developed and implemented.

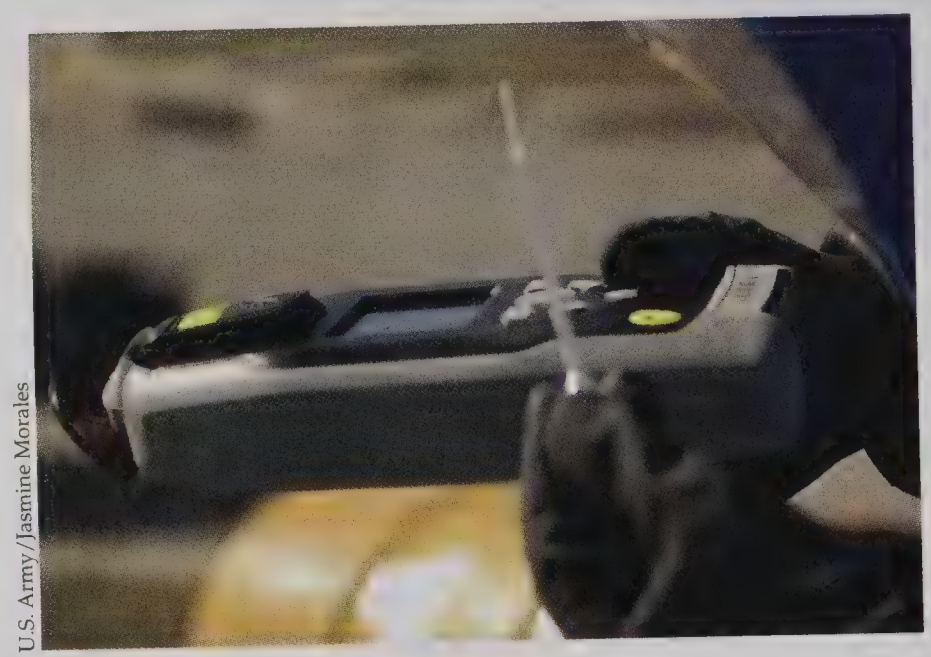
Base camps are the center of life for deployed soldiers and often are the center of many environmental issues. Camp managers must provide soldiers with safe and healthy living conditions, potable water and food, and must provide petroleum products for soldiers' vehicles. They must also manage trash, wastewater and hazardous wastes so that they do not endanger soldier health and safety. Managers must also try to minimize the negative effects that the camp may have on the people who live nearby. Despite the centrality of base camps to contingency operations, there are no standard Army or DoD policies or guidelines about how to design, build or operate them, and they have had no proponent within the Army. A solution could be on the horizon, though: The Army's Training and Doctrine Command has chartered an integrated capabilities development team to help identify desired future capabilities and to determine the best way to establish a proponent and develop policies for base camps in contingency operations.

Base-camp managers and logisticians also struggle with hazardous wastes. In Iraq and Afghanistan, U.S. forces have produced thousands of tons of hazardous wastes, including used oil, batteries, antifreeze, and soil contaminated by fuel or oil spills. U.S. policies require deployed

Right, heavy machinery processes discarded concrete in a landfill at Fort Lewis, Wash.



Below, this computerized sensor identifies chemical agents retrieved during toxic industrial chemical protection and detection equipment training.



U.S. Army/Jasmine Morales

forces to properly dispose of those wastes, which is often not feasible in countries where adequate systems and laws are missing. Thus in every major operation since the end of the Cold War, the United States has had to find ways to appropriately deal with the wastes, such as exporting them to countries that can properly treat and dispose of them or building expensive incinerators in-country. Until that happens, however, vast amounts of hazardous wastes build up at base camps, creating a target for adversaries that could expose soldiers living at the camps to dangerous materials. Transporting the wastes across the country can also expose soldiers or contractors to attacks by insurgents.

For all of these reasons, it is important for the Army to reduce the amount of hazardous wastes its forces generate. Reducing the number and size of fuel spills, recycling waste oil, and using proven techniques such as land farming to treat contaminated soil locally can help. Longer-term solutions include funding research for more efficient vehicles and base camps. Not only would these steps reduce the risks and costs of managing hazardous wastes, but they have the added benefit of reducing the overall logistical requirements and costs for supporting combat forces.

Despite the importance of environmental issues in contingency operations at the strategic, operational and tactical levels, there is a lack of adequate DoD or Army policies or guidance on the subject, and it is not covered in leadership courses. This needs to be addressed if the Army and its soldiers are to take full advantage of the opportunities that environmental issues present in contingency operations and at the same time minimize the risks, costs and liabilities associated with the environment.

Several steps would help improve the Army's ability to address environmental issues:

- Improve policy and guidance for environmental considerations in contingency operations. Work with the Department of Defense to develop guidance that would clarify the need to anticipate and address environmental issues in contingency operations.
- Encourage an environmental ethic throughout the Army that extends to contingency operations.
- Better incorporate environmental considerations into

Today's Greener Army

Environmental issues encompass anything related to the environment that affects the planning and execution of military operations or is affected by those operations. They include (but are not limited to) clean water, sewage-related infrastructure, soldier health, compliance with environmental laws, sustainability, protection of historical and cultural sites, and management of agricultural and natural resources. As defined in *The Army Strategy for the Environment*, sustainability is about addressing the long-term interrelationships of mission, environment and the community, and "a sustainable Army simultaneously meets current as well as future mission requirements worldwide, safeguards human health, improves quality of life and enhances the natural environment."

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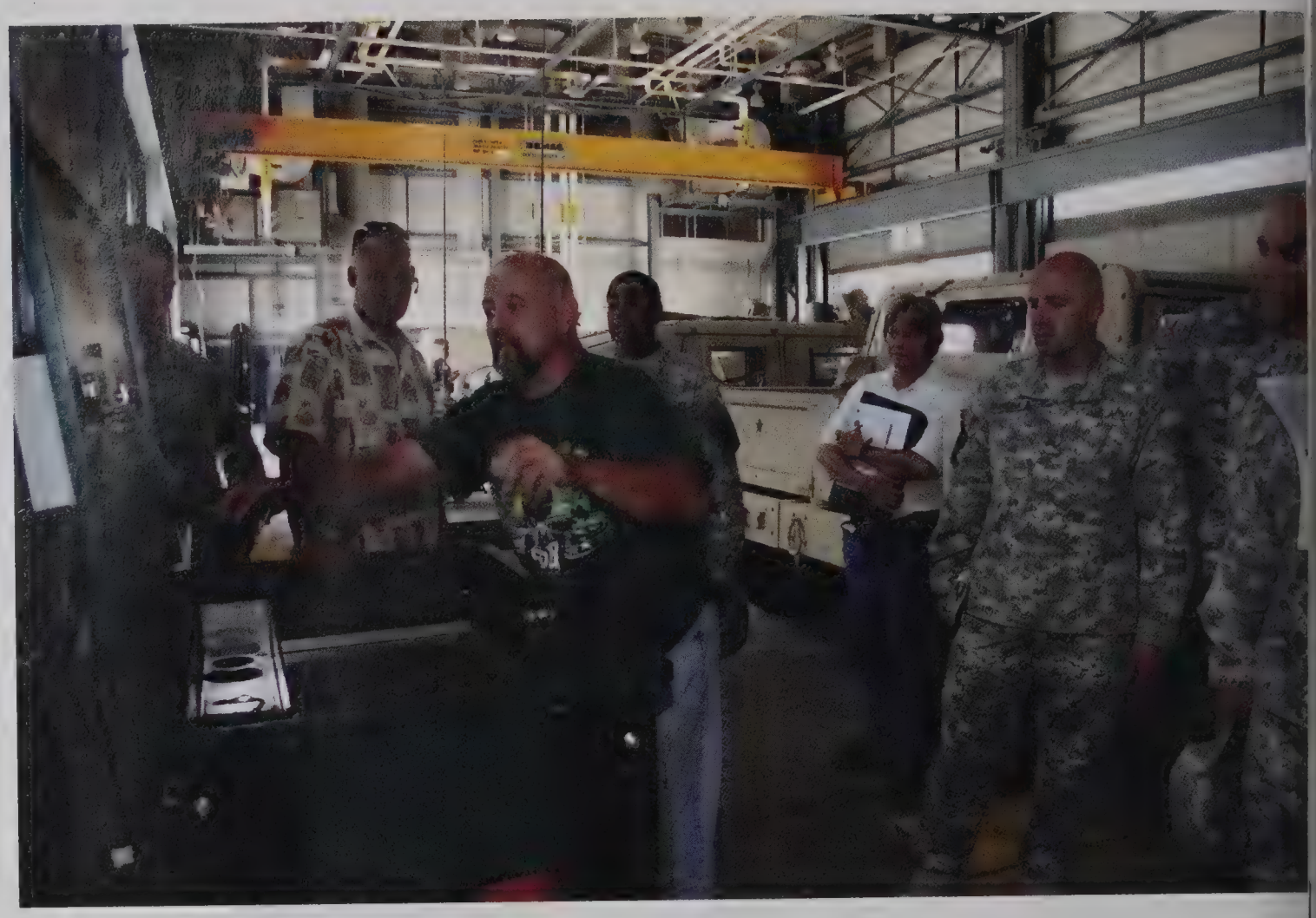
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At Fort Carson, Colo., students in the hands-on portion of the environmental protection officer certification training learn how to operate and maintain a parts washer.



U.S. Army/Kevin Stabinsky

Below, an electronic-waste recycling bin at Fort McPherson, Ga., shreds computers, audio players, cell phones, TVs and other electronics into component parts for recycling.

planning, particularly those that relate to achieving U.S. strategic objectives and to base camps.

■ Improve predeployment and field environmental training so that soldiers and leaders understand the importance of the environment in contingency operations and techniques for reducing the Army's impact.

■ Invest more in environmental resources and good environmental practices for field operations, including training for base-camp managers and unit environmental personnel, development of efficient base-camp designs, and creation of new technologies to manage and reduce the environmental effects of Army operations.

The Army can treat sustainability as an organizing principle that commanders, soldiers, force developers and research organizations can use to improve efforts to manage environmental issues in contingency operations. Not only will a focus on sustainability improve troop health and safety and minimize wastes and cost, but according to the Army's new stability operations manual, FM 3-07, fostering sustainability can be central to the end state that the United States wants to achieve in a contingency operation—a country that will remain stable and enable sustainable development long after U.S. forces leave. *The Army Strategy for the Environment* from the Office of the Assistant Secretary of the Army for Installations and Environment provides just such a sustainability framework and could be used to guide this effort.



U.S. Army/Joint Task Force-East

1LT Caleb Lakey cleans the grounds of a school in Mokren, Bulgaria, as part of the 212th Combat Support Hospital's Joint Task Force-East rotation.

Soft Power Hurts Hard Heads

How Can an Army of Hard Heads Grow an Officer Corps Capable of Using Soft Power?

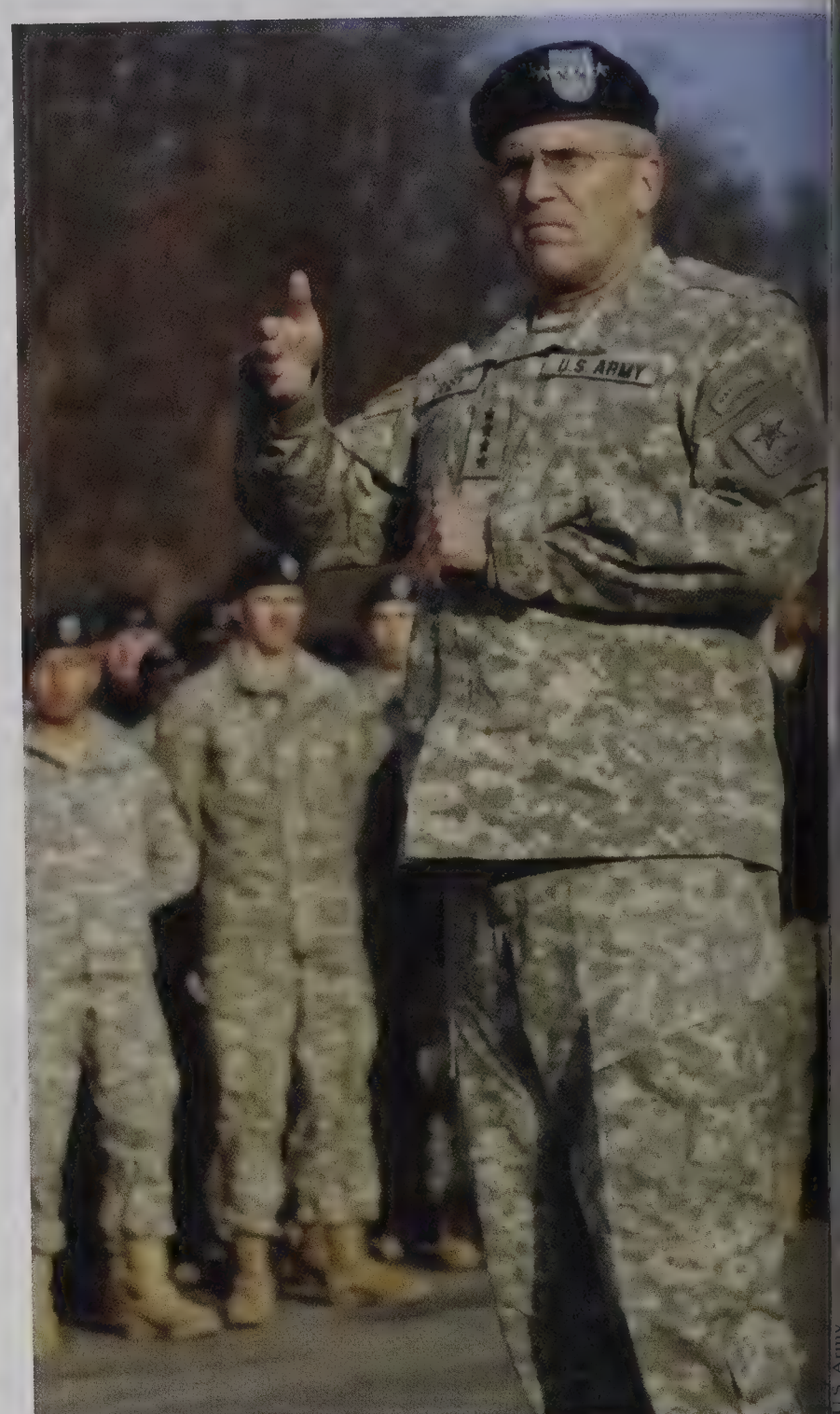
"Do not repeat the tactics which have gained you one victory, but let your methods be regulated by the infinite variety of circumstances."

—Sun Tzu

by COL Christopher Robertson
and
CPT Katie Breckenridge Crombe

Given how war is evolving, is the Army culture evolving alongside it? Does the way the Army develops its officers—through promotions, selections, assignments and education—provide the Army (and the nation) with the type of leaders it will need tomorrow?

Experts nationwide currently debate the nature of future conflict in our world. Will our children and grandchildren continue to fight in a counterinsurgency environment, or will we revert to more conventional conflicts? In actuality, many individuals believe that our future lies somewhere in the middle. According to the 2008 Army Modernization Strategy, the Army views the future as an era of persistent conflict, a period of protracted confrontation among state, non-state and individual actors who increasingly use violence to achieve their political and ideological ends. The strategy



Army Chief of Staff GEN George W. Casey Jr.—addressing soldiers of the 2nd Battalion, 9th Infantry unit—encourages the Army to develop agile and adaptive officers.

indicates that certain emerging global trends will combine with existing local and regional tensions to create conditions that will increase the frequency, intensity and duration of conflict around the world. These trends include globalization and technology, radicalism, population growth, resource competition, climate change and natural disasters, and a proliferation of weapons of mass destruction and of safe havens for terrorists. The strategy goes on to say that an agile strategic stance that includes a broad array of capabilities—including enhanced interagency and multinational capabilities—will be necessary for success.

More importantly, Army Chief of Staff GEN George W. Casey Jr. routinely calls upon our trainers, educators and commanders to develop agile and adaptive officers—young men and women capable of engaging other nations across the full spectrum of conflict. Our officers, regardless of the type of conflict or engagement, must be ready to secure our nation's best interests. This will require an officer corps capable of thinking critically and leading in complex environments.

Our young officers have answered GEN Casey's call. In this so-called captains' war, these leaders have come to rely as much on the soft powers of nation building, diplomacy and strategic communications as they have on the hard powers of modern-day weaponry. It is time we recognize the importance of these skills that our officers were neither trained, educated nor assigned to execute because of our focus on linear warfare.

The recognition of nonkinetic prowess by the Army culture is the first step in evolving the way we develop our next generation of strategic thinkers. Core warfighting skills will not dissolve during this evolution; they will remain the foundation of any officer's professional development. They will be developed, however, alongside skills demanded today and in the future by the changing face of war. Our senior leaders recognize that the winds are shifting, but they must also lead the way in creating a culture that nurtures emerging leaders with broader experiences. We, the Army enterprise, continue to promote and select officers based largely on their success as executors of kinetic power. Our most senior leaders state that they value broadening, education and nontraditional assignments, but they do not routinely promote or select officers who excel in the fields. They say that command isn't the only way to the to and then select only prior commanders for future commar and key billets.

Our senior leaders must select a number of officers wl have not spent all their time in the operational Army. T Army needs leaders who have strayed from the oft-cit "yellow brick road" that produced today's generation generals.

When will we come to appreciate those officers w have not walked the traditional path—officers whose ed cation and broadening assignments may have instilled them the skills necessary to fight in an "infinite variety circumstances"? Our culture must change, we know this but is the Army willing to make that change?

Army culture is driven by incentives—promotions a selections. Promotions and selections are driven by the put of senior leaders. Our leaders, specifically our lie tenant colonels and colonels, must begin to mentor th officers to stray from the traditional career path that l them to the success they now enjoy. Our operational for must be willing to accept some near-term risk in stren

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COL Christopher Robertson *is chief of the Officer Professional Management System (OPMS) Task Force, U.S. Army Human Resources Command. He previously served as the Signal Enlisted Branch chief and division chief for the Officer Combat Support Division.* ***CPT Katie Breckenridge Crombe*** *is company commander of the Warrior Brigade, Walter Reed Army Medical Center. She was a strategist and writer for the OPMS Task Force.*

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Deputy Commandant of the U.S. Army Command and General Staff College BG Ed Cardon briefs leaders at the Sister Service College Conference at Fort Leavenworth, Kan., hosted by LTG William B. Caldwell IV (second from left), commander of the Combined Arms Center and CGSC commandant.

to allow our future leaders to attend graduate school, work in a nonbrigade combat team (BCT) environment and teach/coach/mentor our young soldiers in the generating force. It is critical to our national interests to have visionary leaders at the helm; we cannot grow our next generation of strategic thinkers in a purely BCT/Army force generation-driven environment. Command is important, but it cannot be the only path to success. Indeed, once our officers are broadened, educated and assigned to noncommand positions, we must promote and select them. Our personnel systems must become as agile and adaptive as our officers.

Straying from career-path templates is not a revolutionary concept. While Dwight D. Eisenhower was serving as a trainer during World War I, he was selected to serve as an observer for the transcontinental convoy that was tasked to determine the fitness of the Army's motorized fleet and our road system. This noninfantry, noncommand, nondeployed assignment prepared Eisenhower to later revamp the Army's motorized weapons and transport system (and to create our nation's interstate highway system as President). He stepped off the yellow brick road and turned out OK. Assignments and experiences outside of our core help us develop greater perspective when making decisions later in our careers.

The Army is beginning to change its Industrial Age approach to development. In order to broaden, educate and promote officers, we can begin using some underutilized programs already in place. There are two joint interagency intergovernmental multinational (JIIM) internship programs that assign officers to other government organizations to broaden their exposure. The first program gives commanders the ability to select officers for intense 90-day internships at other agencies—such as the Department of Justice or Homeland Security, Department of State or even local governments—that allow them to observe another government agency function from the inside.

Another JIIM program stations officers in the National Capital Region for two years while they attend an intermediate-level education course at Fort Belvoir, Va.; participate in a one-year interagency internship; and spend a year on the Army Staff implementing the knowledge and experience gained at the sister organization. The 2007 National Defense Authorization Act actually supports this notion o joint qualification. As we continue to fight asymmetri wars, we must recognize and promote officers who excel i these positions, just as we would recognize and promot officers who excel in command.

The case for expanded opportunities for gradu ate education mounts as the spectrum of con flict broadens. Officers must understand th historical, political and cultural forces that d rectly affect the conduct of their soldiers an their families. It is imperative that our batta ion and brigade commanders enable and support your officers' hiatuses from the tactical Army to civilian schoo ing. Our young officers are raised in an environment "right now" technologies, with every answer at their fi gertips. Our operating tempo and muddy-boots-focuse culture tilt the scale in favor of online, night and weeken master's degrees. The essence of education lies not in th materials we read, however, but in classroom discussio and relationships formed.

Historical perspective and critical thinking are not deve oped overnight, they aren't developed purely online, a they are not developed in a military-centric environment is not until our ideas and methodologies are tested by pe ple who think differently than we do that we understa where we fit in the world, regardless of the conflict's natu or location. As MG David Fastabend and coauthor Robe Simpson contend in their article "The Imperative for a C ture of Innovation in the U.S. Army: Adapt or Die" (ARM Magazine, February 2004), our Army—above all else must be "superior in the art of learning and adaptation."

The balance between training and education in offi development is difficult to achieve. In crisis and wartime, as an institution we lean on what we know training. Training, in essence, is owned by the Army a can be changed and adapted at a moment's notice. Train prepares us for the "known-knowns," and often provi us with a series of checklists, steps and "what-to-thin strategies. Conversely, education at its core provides with the intellectual capacity to prepare for the "known-

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knowns" and *how* to think. Training and education complement one another. In our operationally heavy environment, junior leaders train and retrain repeatedly. They usually blast through their checklist two minutes into their first patrol, convoy or tribal teatime. These junior officers then begin to use and rely on the soft-power techniques they were never educated in. They now need time to reflect, synthesize and communicate their experiences and thoughts in an educational environment in order to prepare for the next level of critical thinking.

A generation of strategic-thinking and educated officers cannot develop through expansion in graduate slots alone; it must develop through a change in culture, a change in priorities. The Chief of Staff of the Army recognizes the importance of civilian education. The problem exists in the middle ranks—the lieutenant colonels and colonels who mentor captains and majors away from civilian education and broadening opportunities and into one brigade combat team job after another because that is what the culture sees as important. They are not malicious in their intent; they were raised in a culture that valued one job—command. In turn, they mentor their captains and majors to strive for that same job. There is one monumental difference from the time these lieutenant colonels and colonels spent as captains: We are now a nation at war.

When today's field-grade commanders were captains, command was the pinnacle. Success as company commanders drove their selection for Command and General Staff College (intermediate-level education) and their jobs as majors. Spending 12 hours a day working hard as a commander with a culmination exercise at the National Training Center (NTC) was necessary for future success. Things are much different now. We ask captains to deploy two, three and four times, working 18 hours a day for 365 days in whatever job they are in. We then tell them that they must succeed in command as well. After spending four years in a brigade combat team with 24–36 of those months deployed, we tell them that going to graduate school is unnecessary and that another deployment with the unit is more beneficial to their career in the long run. The culture tells them that promotion boards like deployments, awards and command experience, implying that graduate school, fellowships or broadening opportunities are nice but unnecessary. Education, however, is necessary because of the growing complexity of war and the global environment, which demand so much more of our current officers. Today's captains will be our battalion and brigade commanders in the next war. If their entire experience as Army officers rests at the BCT level and below, we as an institution fail to equip them with the tools required to think strategically. If they cannot look at their mission from a different perspective, call upon the wisdom of history for answers, or use their relationships built through interagency partnerships, then our Army may not be fully prepared for our country's next security challenge.

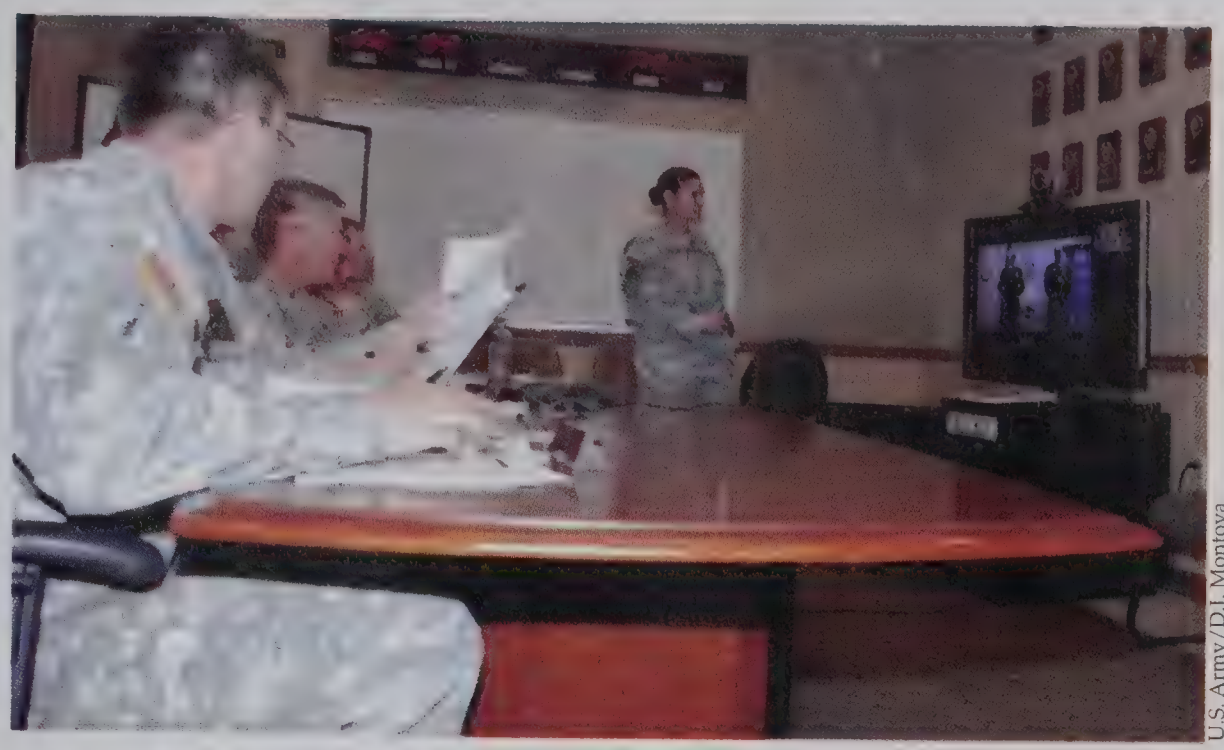
Army culture is driven primarily by incentives—promotions and selections. Just as we lean on training as our "go-to" education in wartime, we lean on quantifiable and recognizable positions as our go-to during promotion and selection boards. Promotion and selection board members universally understand commander, executive officer, S-3, brigade combat team S-4, or NTC observer-controller. Rarely do we recognize the importance of positions like adviser, liaison, recruiting company commander or basic officer leader course instructor. If a promotion/selection board must choose between two officers with strong files, one who spent three years in a deployable BCT, two as a rifle company commander and one as the battalion S-3, and one who spent two years as an assistant professor of military science in an ROTC battalion and one year as cavalry troop commander in Iraq, the board would almost surely select the former. It is ingrained in us to value time in command and time deployed above all else. Command, in essence, is the cornerstone of our Army: Leading soldiers is what we signed up for; deploying into a combat theater is what we train for. Thus it follows that an officer who commanded a traditional company and deployed multiple times must be "better" and have more potential than an officer who has done neither, right? Not necessarily. Promotion and selection based solely on these two experiences will not advance some of our brightest officers, and may even select some who will not succeed in future dynamic environments.

How do we change the promotion board process to recognize those capable of operating effectively in tomorrow's



From left, 2LT David Provencher, platoon mentor CPT Curt Owens and 2LT Ryan Brown discuss their mission during the culminating week of Basic Officer Leadership Course II.

ver-changing environment? The easi-
st dynamic to change is the way in
hich the Department of the Army
ecretariat selects and briefs board
embers. First and foremost, our
oard members must be agents of
hange themselves. They should not be
ardheaded in their approach and
ust be educated, broadminded and
ffective at leading our soldiers and
vilians in this asymmetrical era. Al-
ough some of these board members
ill be those individuals who suc-
eeded on the current career path, a
umber of them should be officers
ho have risen through the ranks by
raying from the traditional progres-
on—officers who will recognize a di-
mond in the rough, officers who can
asp the value of nontraditional as-
gnments and experiences.



U.S. Army/D.J. Montoya

The 1st Space Battalion conducts a traditional promotion board via video teleconferencing at U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, Peterson Air Force Base, Colo.

We also must do a better job of educating promotion
oard members. For a traditional board, the members
ould spend the first day in a classroom/seminar envi-
nment, listening, reflecting and digesting information
om some of our nation's leading experts on strategy, his-
ry, anthropology and intelligence. These experts would
scuss their vision of the future—where America will fit
the world 10, 20 or 30 years from now. They would then
journ for the day and discuss ideas of what kind of
ader our Army needs over the next two or three decades.
hat will the Army and nation expect from leaders in the
ture? Selecting change-agent board members, combined
th a day of education, reflection and discussion, would
a dramatic first step in changing the promotion and se-
tion process for our future Army.

The transfer of experience and skill sets is fundamental to
ganizational success and growth. This experience must
nsfer to the greater Army enterprise. Our generating
ce deserves the same caliber of officers as our deployed
ce. Historically, our personnel scales favor the deployed
ce in wartime. While this is acceptable and sustainable
one, two or even three years, today's protracted war has
licted irreparable damage on our generating force. Our
rsonnel priorities must shift back to the generating force.
ir deployed units, accustomed to fighting at more than
0 percent personnel strength, must begin to accept some
k now in order to sustain a trained, ready and educated
ce in future conflicts. Once our commanders release
se excess officers from the field, the assignment branches
ust send them to school and back into the generating
ce. As simple as this may seem, the transfer from a
rces Command unit to school to the generating force of-
does not occur. Officers routinely shuffle from a de-
yed unit to school and back to a deployed unit or even
m deployed unit to deployed unit, depending on the pri-
ties of the day. The inculcation of *branch qualification* and *key developmental* into the assignment branches' vernacular, coupled with the Long War, has resulted in massive shortages in the generating force.

Agility and adaptability are not posters in proponents' offices and certainly not branch offices. Sure, assignment officers would like to send everyone to generating force and broadening assignments—their phone calls would be much more cordial. Just like deployed units, however, the Human Resources Command has a mission: It must staff the Army according to the manning guidance established by the Chief and manage its officers according to the paradigm laid out in Department of the Army pamphlet 600-3. Until the manning guidance shifts and a new 600-3 is published, digested and enforced by assignment branches and leaders alike, assignments will remain the same.

We live in a country that witnessed the development of Microsoft by a college dropout and the advent of Google by two college kids in a dorm, both within the past few decades. Our country's most successful and effective leaders have been agile and adaptive thinkers who took hold of an idea and ran with it. Innovative and strategic thinking is the key to success in business, government and, most critically, the Army. To develop and nurture our next generation of future leaders, we must first acknowledge that tomorrow's Army will look different from today's. The experiences and skills that built today's commanders will not be the same for our junior officers. To prepare for this unknown road, we must mentor our officers to value and pursue educational opportunities, broadening assignments and time spent away from key developmental positions. We must then assemble a dynamic, effective and intelligent group of change agents to sit in a boardroom and select those strategic leaders who will take our Army through the next century. Our hardheaded approach to the personnel system must end. ★

'Stacking Iron'—MAFEX For Army Forcible Entry

Forcible entry operations are inherently complex and always joint. Often only hours separate the alert from deployment. The demands of simultaneous deployment and employment create a distinct set of dynamics. Operations are carefully planned and rehearsed in training areas and marshalling areas. Personnel and equipment are configured for employment upon arrival without reception, staging, onward movement, and integration.

—Paragraph 8-24, FM 3-0 *Operations*, February 2008



More than 12 different units, among them C-130s, participated in the semiannual Mobility Air Forces Exercise (MAFEX) conducted by the U.S. Air Force.

Prepares Air Assets Operations

By Scott R. Gourley



MAFEX involves the massing of resources such as F-16s to carry out air-land and airdrop insertion of U.S. soldiers.

Photographs: Scott R. Gourley

The challenges of modern forced entry operations are hardly surprising. In addition to the monumental physical hurdles of consolidating and applying combat power in a three-dimensional battlespace, America's armed forces are attempting to address this Joint service operational mandate while fighting a global conflict and continuing transformation efforts that began in the last decade.

As part of its Joint operational preparations, the U.S. Air Force conducts a semiannual Mobility Air Forces Exercise (MAFEX) to provide advanced airdrop training to mobility aircrews while focusing on the time-sensitive delivery of Army personnel and their supporting military equipment into medium-threat-environment combat zones.

The latest exercise in the series was designated MAFEX '09A. More than 12 different units participated in the culminating event



The May exercise included C-17 platforms from installations throughout the United States that assembled over the Nevada Test and Training Range, north of Nellis Air Force Base, Nev.

in May, which included C-17 and C-130 assets departing from various installations throughout the United States and performing a rendezvous over the Nevada Test and Training Range (NTTR), north of Nellis Air Force Base (AFB), Nev.

"Essentially, what we're doing here is trying to effect the elements of the Army's 82nd Airborne Division forcible entry air operations," explained Maj Chris Raymond, an instructor pilot at the U.S. Air Force Weapons School, Nellis AFB.

According to Maj Raymond, the process began several years ago. "We have tried to perfect this multiple times, specifically since [the conflict in] Grenada, trying to effect things from lessons learned there," he said. "And we have been trying to improve upon formation operations since then."

The lessons learned from the field have been made more complex by the enhanced challenges stemming from force transformation activities.

"There were a lot of lessons learned that we have seen on the drawdown of personnel as well as assets," Maj Raymond said. "We've had to constantly go back and forth with the Army, and as they continue to modularize, becoming more light and mobile, we also have to adapt our tactics. That's exactly what these pilots are doing at MAFEX: They are adapting their tactics as strategic and tactical airlifters to be able to present that effect for the Army."

"We often talk about effects-based operations, just like the Army does," he added. "And this is what we can provide for them: to be tactically more maneuverable while still providing the same footprint that the Army needs in the timely manner in which they need it—providing both the structure they need, in terms of heavy equipment and armament, as well as the personnel in a timely manner."

The broad air scenario behind MAFEX involves the planning and use of geographically separated air platform units—both "strategic direct delivery" aircraft like the C-17 and "tactical airlift platforms" like the C-130E/H/J—and the massing of those resources to carry out both airdrop and air-land insertion of U.S. Army warfighters and the equipment that they would need for the first 72 hours of ground operations.

The raw numbers of the airlift are impressive. The air drop phase, for example, involved 14 C-17s (drawn from

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Scott R. Gourley, a freelance writer, is a contributing editor to ARMY Magazine.

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An Air Force E-3 Sentry airborne warning and control system was part of the exercise, which simulated elements of the 82nd Airborne Division's forcible entry air operations.

four separate bases) and 22 C-130s (drawn from three bases) conducting simulated airdrops over NTTR's Jefferson drop zone. The C-17s simulated the delivery of more than 20 vehicles, more than 10 platforms and more than 100 bundles; the C-130E/H/J simulated the airdrop of approximately 1,000 warfighters.

Air-landing operations were simulated by five C-17s and two C-130s at Keno landing zone. Those operations simulated the resupply of a forward operating base with approximately 50 vehicles.

"We're not just doing simulation exercises in a vacuum," Maj Raymond emphasized. "We're actually integrating assets as best we can. We don't have a more realistic Joint exercise between the Air Force and the Army for this type of effect. When you're talking airlift effects, there isn't anything else like MAFEX in terms of an Air Force exercise."

He noted that MAFEX planners had been working with elements of the 82nd Airborne Division and other Army planners "for at least a year and a half." Along with the Army's input, the participating C-17 and C-130 platforms were joined by an E-3 Sentry airborne warning and control system (AWACS), F-16CJ/F-16CM, F-15E, one MQ-9 Reaper unmanned aerial system, and other Air Force intelligence and support assets.

MAFEX '09A involved more than 80 aircraft platforms, including 41 airlifters, 14 aerial tankers, two C2ISR (AWACS and MQ-9) and 30 Combat Air Force (CAF) platforms. The aircraft were assembled in the skies above Nevada from 15 airlift bases, seven tanker bases, one CAF base and two C2ISR bases.

The integration exercise also serves as a "graduation event" for Air Force pilots who are completing nearly six months of intensive training at the USAF Weapons School.

Capt Chris Stephens, USAF, one of those graduates and the C-17 lead pilot for MAFEX '09A, observed, "I could 'talk C-130 and C-17' very well when I came here, and I could execute anything that we do. But when you start bringing in an F-15 or F-16, or the ground force commander on the Army side, or a space asset, I couldn't have told you how to best utilize those four or five months ago. Now I actually know some of the capabilities. I know how to speak their common language, and I know how to incorporate them into a plan like this. So now when I move out of the wing and out of my MAF [Mobility Air Force] comfortable zone to somewhere else like a CAOC [combined air operations center] operating forward, I can address any plan that's put in front of me. I may not know the answer, but I can find the right asset and talk to the

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C-17s delivered more than 100 bundles, more than 10 platforms and more than 20 vehicles; the cargo planes also performed air-land operations to simulate the resupply of a forward operating base with some 50 vehicles.

asset to make that plan."

"I've done a lot of the forcible entry exercises on a much smaller scale, but nothing at this level," he said. "This is definitely a big step up, in my book, from where I was."

"What's best about this program is that I am working with guys who are interested in the tactical part of the airplane and progressing with those tactics," Capt Stephens added. "We're not only learning how to plan this event and execute it, but we are able to take that back to our units where we can plan similar events and then train the crews who will actually be executing these operations. That's one of the big benefits that I see."

Capt Stephens based his assessment on real-world experience. Referring to his "first combat airdrop as an air traffic commander, running the show from beginning to end," he recalled, "It was just sprung on us. We hadn't been doing airdrops much. [Other units] had been handling most of it in theater. But the situation was laid in my lap and they said, 'Go. You have a week before you're dropping.' And I had to come up with the plan. These lessons I've learned here would have definitely shortened that time."

Expanding on the real-world applicability of his training, Capt Stephens said, "A lot of what we've done on both sides of 'the floor'—Operations Enduring Freedom and Iraqi Freedom—and a lot of the lessons learned that we had early on are directly reflected in lessons in this course. That involves airlift as well as tanker assets and how to properly employ those during this conflict, as well as what situational awareness they need behind their decisions."

"I think the airlift community is definitely evolving in their tactics," Maj Raymond said. "As the Army recognizes that it has had to become lighter and more mobile and that it has had to change its tactics, the airlift community is doing the same thing, possibly with fewer assets and possibly with fewer people. For that reason, we have pilots like Capt Stephens and his classmates who are going to be able to do more with less."

Maj Raymond noted that early plans call for Army elements to participate in the next MAFEX event, slated for November.

"Six months from now, we hope to bring actual soldiers and some of their heavy weapons here, too," he said. "These guys [planning and flying MAFEX '09A] are actually validating what we hope to bring in November. This is the culmination of almost five months solid of academics together with hours of training, planning and flying." ★



PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

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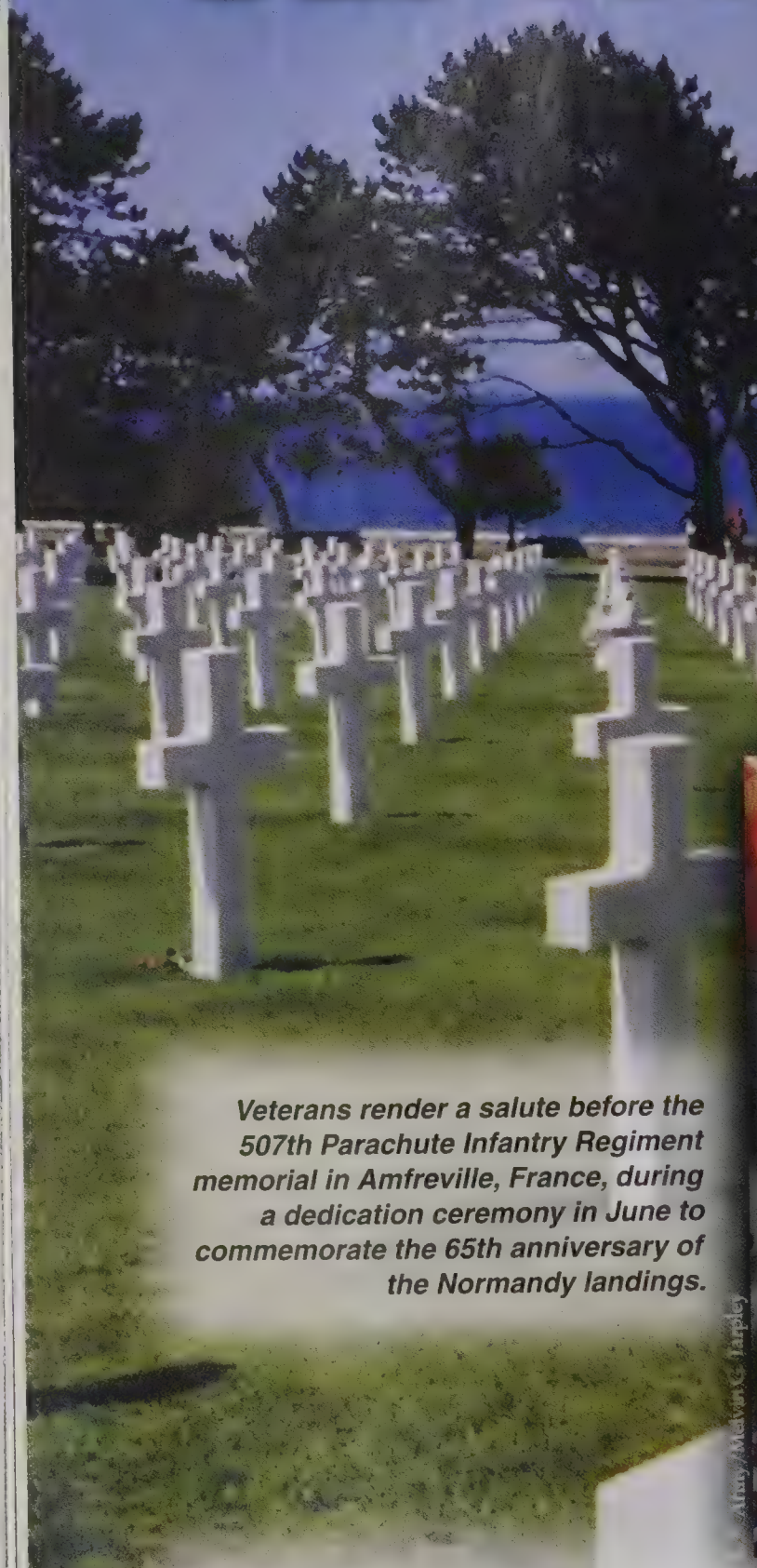
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The 65th Anniversary o



Veterans render a salute before the 507th Parachute Infantry Regiment memorial in Amfreville, France, during a dedication ceremony in June to commemorate the 65th anniversary of the Normandy landings.

Mary Blake Hardin



Army/Alexandra Hanley

President Barack Obama spoke at a ceremony celebrating the 65th anniversary of D-Day at the Normandy American Cemetery and Memorial in France on June 6. The cemetery, on bluffs overlooking Omaha Beach, is the resting place of nearly 9,400 servicemembers. The names of another 1,557 Americans who were killed during the invasion of Normandy but could not be located or identified are listed at the cemetery.

"So much of the progress that would define the 20th century, on both sides of the Atlantic," said President Obama, "came down to the battle for a slice of beach only 6 miles long and 2 miles wide. More particularly, it came down to the men who landed here."

"In America," the President said, the mission "was an endeavor that inspired a nation to action. A President who asked his country to pray on D-Day also asked its citizens to serve and sacrifice to make the invasion possible. On farms and in factories, millions of men and women worked three shifts a day, month after month, year after year. Trucks and tanks came from plants in Michigan and Indiana, New York and Illinois. Bombers and fighter planes rolled off assembly lines in Ohio and Kansas, where my grandmother did her part as an inspector. Shipyards on both coasts produced the largest fleet in history, including the landing craft from New Orleans that eventually made it here to Omaha."



President Barack Obama, the Prince of Wales, Canadian Prime Minister Michael Harper, President of France Nicolas Sarkozy and British Prime Minister Gordon Brown hear a firsthand account of D-Day from a World War II veteran on the overlook of Omaha Beach, France.

U.S. Army/Visual Group



World War II veteran Henry (Duke) Boswell proudly wears his jump wings at a memorial ceremony at Ste. Mère Église, France, where he landed on D-Day after parachuting from a C-47 Skytrain.

U.S. Army/Visual Group

The President called "the story of Normandy ... the story America; of the Minutemen who gathered on a green in ington; of the Union boys from Maine who repelled a rge at Gettysburg; of the men who gave their last full asure of devotion at Inchon and Khe San; of all the ng men and women whose valor and goodness still y forward this legacy of service and sacrifice.

It's a story that has never come easy, but one that al- s gives us hope. For as we face down the hardships struggles of our time, and arrive at that hour for ich we were born, we cannot help but draw strength n those moments in history when the best among us e somehow able to swallow their fears and secure a beachhead on an unforgiving shore."

During the ceremony, French president Nicolas Sarkozy presented 508th Parachute Infantry Regiment, 82nd Airborne Division veteran Zane Schlemmer, representing the United States, with the cross of the Legion of Honor, France's highest distinction. Among 38 American veterans who received the honor this year were:

- Arden Earll, 29th Infantry Division.
- James K. Kunkle, 401st Fighter Squadron, 370th Group of the 9th Air Force.
- Antonio Ruggiero, 2nd Ranger Battalion.
- Louis J. Venditti, 101st Airborne Division.
- Benjamin Franklin, 16th Regiment, 1st Infantry Division.

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st Infantry Division Soldiers Honor D-Day Heroes

By LTC Matthew S. Hackathorn

Each year on June 6, America focuses on the successful invasion of Normandy in 1944 by Allied forces during World War II. The D-Day assault along the coast of northern France—the largest amphibious assault in the history of warfare—broke a seemgly impenetrable Nazi stranglehold on Europe and serves day, 65 years later, as a solemn reminder to the world of the crifice and achievement of those who represent freedom to many.



The Big Red One Band entertains a crowd of hundreds gathered during the parade to honor the 65th commemoration of D-Day in Abilene, Kan., GEN Dwight D. Eisenhower's hometown.

The 1st Infantry Division (the Big Red One) led the way ashore on that pivotal day, attacking on Omaha Beach to besiege a dug-in and relentless defense by battle-hardened German troops. Elements of the 16th, 18th and 26th Infantry Regiments endured intense machine-gun, mortar and artillery fires while crossing some 200 yards of open beach.

By the end of the day, the Big Red One had secured the beachhead for follow-on units, had begun the advance inland and provided hope for the people of occupied France.

"The Big Red One has a tremendous legacy, and we're very proud of it," said MG Vincent K. Brooks, commander of 1st Infantry Division and Fort Riley, Kan. "The successful invasion of Normandy is one of the proudest moments in American history, and the 1st Infantry Division played a huge role."

To honor the rich and storied legacy of the Big Red One, senior leaders of the 1st Infantry Division ensure that today's soldiers know and understand their heritage.

"Big Red One veterans built a strong foundation for our division's legacy, and today's soldier carries that legacy forward into Afghanistan and Iraq," said 1st Infantry Division CSM James B. Champagne. "Therefore, we want to honor the service of our veterans by educating young soldiers about the history of the 1st Infantry Division."



Patriotic children admire marching soldiers from the 1st Infantry Division during the 65th commemoration of D-Day parade in Abilene.

To instill that important history lesson, 1st Infantry Division soldiers received an increasingly rare opportunity to meet with World War II veterans at the 65th D-Day commemorative activities held June 5 through 7 in Normandy, France; Wheaton, Ill.; and Abilene, Kan.

CSM John B. Jones of the 1st Brigade Combat Team led a group of 19 soldiers selected from across the division on a trip to Normandy to take part in ceremonies honoring World War II veterans at the site of the landings.

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*LTC Matthew S. **Hackathorn** is a public affairs officer with the 1st Infantry Division.*



PFC Lawrence Hall (left) and PFC Aaron Fisher of the 1st Battalion, 16th Infantry Regiment, 1st Brigade Combat Team, 1st Infantry Division, settle into a restored U.S. Army Jeep with 1-16 Infantry markings during an educational trip to Normandy. The 16th was the first unit to assault Omaha Beach on D-Day.

"In my 27 years in the Army, this was my greatest onor," said CSM Jones, who led the group on a tour of uch French villages as Colleville-sur-Mer, where 1st Infntry Division troops landed on Omaha Beach. "Everyhere we went, local people would recognize our patch and say, 'The Big Red One—that's the 1st Infantry Division!'"

The mayor of Colleville hosted a dinner for 1st Infantry Division soldiers, D-Day veterans and people from the local community. "During that dinner, every soldier had a chance to talk to veterans and listen to their stories," CSM Jones said. "We met one French local who was wearing a World War II jacket with a Big Red One patch. He told us that he wears it every year because a soldier from the 1st Infantry Division saved his great-grandfather's life during World War I."

For SSG James D. Bragg of 1st Battalion, 34th Armor Regiment, the Normandy trip was a once-in-a-lifetime experience. "As we entered the town of Colleville, we began to see the Big Red One patch on telephone poles and posters," said SSG Bragg. "The locals treated us like celebrities when they saw us coming. Everyone wanted to shake our hands and take pictures with us. It was such an honor to represent the division and realize what our veterans did for this town."

During the trip, 1st Infantry Division representatives conducted a wreath-laying ceremony at the 1st Infantry Division monument, escorted veterans visiting the cemetery and assisted with security during President Barack Obama's visit.

Another group of 1st Infantry Division soldiers received a similar lesson from D-Day veterans west of Chicago. Thirty-five members of the 1st Infantry Division Combat Aviation Brigade (CAB) flew four aircraft to Wheaton to serve as static displays at



Soldiers of the 1st Infantry Division's Combat Aviation Brigade don the red version of the Big Red One patch before marching in the Abilene D-Day parade. The 1st Infantry Division partnered with the city and the Eisenhower Library to commemorate D-Day in Abilene.



World War II veterans visit one of the displays at the First Division Museum at Cantigny, in Wheaton, Ill.

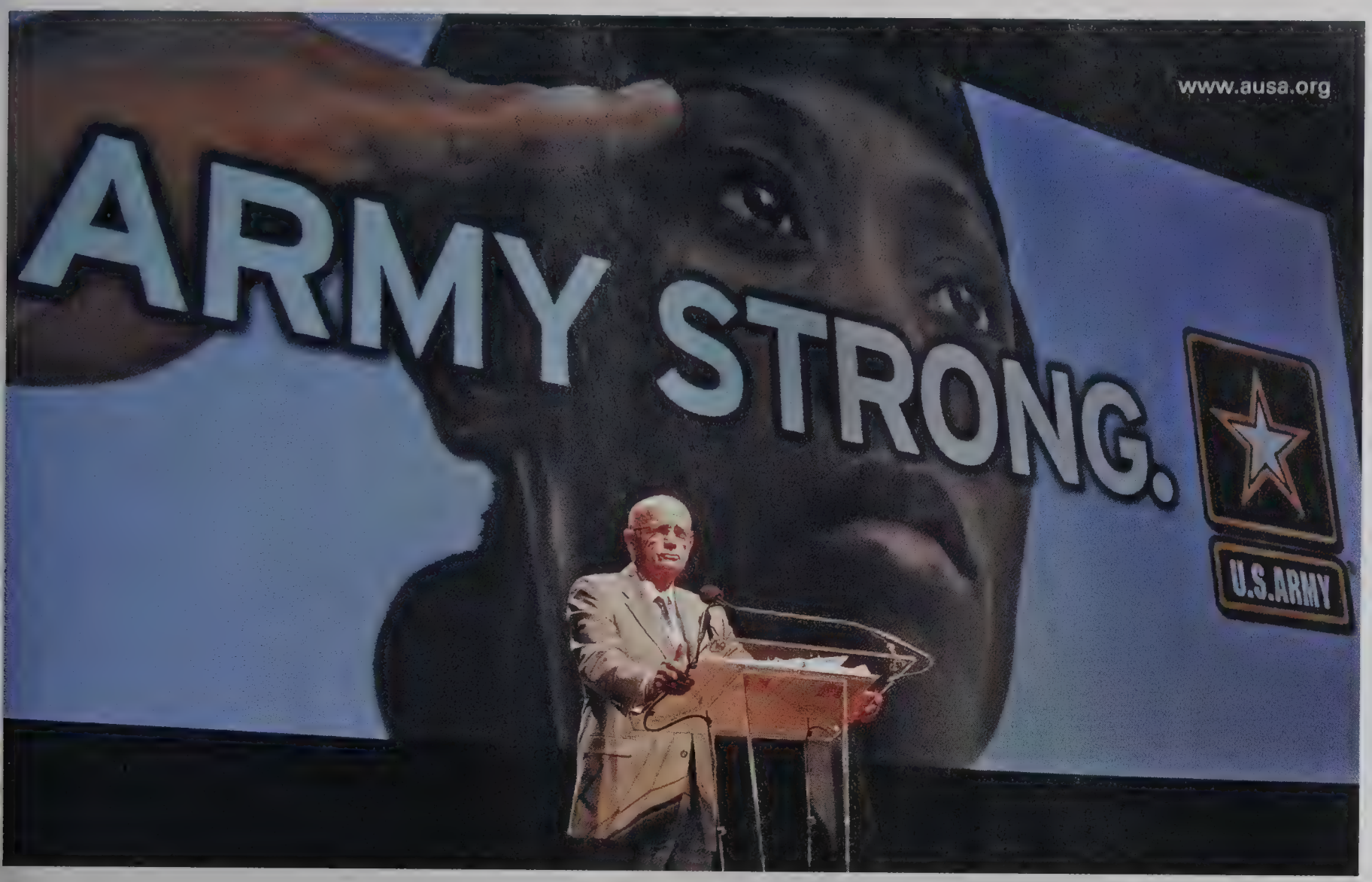
the Cantigny First Division Museum ceremony honoring D-Day veterans on June 6. Nearly 500 World War II veterans—including about 100 who took part in the D-Day invasion—participated in the public event.

The First Division Museum at Cantigny (pronounced Can-tee-nee) is named for the World War I battle of Cantigny, France, on May 28, 1918—the first American battle of World War I and the first in the division's history. The museum is located on the historic estate of COL Robert R. McCormick, who commanded the 1st Division's 1st Battalion, 5th Field Artillery, at Cantigny, and who was the owner and publisher of the *Chicago Tribune* newspaper.

"Robert McCormick achieved a great deal in his life and became very wealthy," said Paul Herbert, executive director of the Cantigny First Division Foundation. "But it was his service in France during World War I that had the most



A restored personnel landing craft vehicle, similar to those that transported troops to Omaha Beach on D-Day, draws spectators at the museum at Cantigny.



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First Infantry Division soldiers walk on Omaha Beach 65 years after fellow Big Red One troops mounted their assault on D-Day in 1944.

compelling effect on his life. Upon returning from the war, he renamed the family farm Cantigny."

"COL McCormick volunteered for service at the age of 35, when he was president of the Chicago Tribune Company," he added. "He'd already been a Chicago alderman and president of the sanitary district. He didn't have to go, but he did. McCormick was very proud of his time as a soldier in the U.S. Army. He loved soldiers and respected their service to our nation, so it's appropriate that a major part of his vast estate is dedicated to preserving military history—and, in particular, First Division history."

The Cantigny estate is a public park that, in addition to the First Division Museum, boasts extensive gardens, McCormick's historic home and a championship golf course. At the D-Day celebration, the museum unveiled a restored and rare World War II Landing Craft, Vehicle, Personnel (LCVP) similar to the ones that transported Allied troops on D-Day.

"We're very proud of the value the landing craft adds to the museum," said Herbert. "The LCVP will be here 100 years from now to help explain the price that was paid for our freedom—along with the powerful human story behind it."

One CAB soldier especially appreciated his opportunity to staff the aircraft static displays and trade stories with World War II veterans. "It's such a humbling experience to be able to talk to these guys," said SGT Justin Denhardt of 1st Squadron, 6th Cavalry Regiment. "I wouldn't be here if it wasn't for all their work. They are my history."

Perhaps the largest and most prestigious Stateside D-Day tribute, however, took place in the backyard of the man responsible for planning and executing the invasion—GEN Dwight D. Eisenhower. Once again, 65 years later, the Big Red One led the way.

The 1st Infantry Division and Fort Riley are located only about 20 minutes from Abilene, the former home of GEN Eisenhower and the location of the Eisenhower Presidential Library and Museum, dedicated to preserving not only the documents and artifacts of "Ike's" presidency, but also his World War II-era documents and memorabilia.

In conjunction with the Eisenhower Presidential Library and the city of Abilene, a group of 200 soldiers from the 1st Infantry Division marched in a parade led by MG Brooks and CSM Champagne. In addition, soldiers set up static displays of modern military equipment for hundreds of veterans and civilians to view and discuss.

"By participating in annual D-Day activities, we connect the past to the present," said MG Brooks. "There are soldiers serving today in harm's way just as there were soldiers serving on that fateful day in 1944."

"It's a matter of showcasing the Big Red One and its intimate connection and human history, as it was with D-Day as well," MG Brooks added. "Today we carry on the honors and traditions of those regiments that fought on Omaha Beach."



Follower Robotic Vehicles Improve Convoy Safety

SGT Mark Ross is in a combat zone, behind the wheel of an M19A3 tractor with a 5,000-gallon fuel trailer attached. The convoy is about to leave Forward Operating Base (FOB) Fallujah, Iraq. His convoy will deliver much-needed resupplies to FOB Warrior in Kirkuk. SGT Ross is full of anxiety because he is more than certain that he is going to be ambushed; he just doesn't know how or when. Perhaps it will be with a rocket-propelled grenade or an improvised explosive device (IED). His experience tells him the initial seconds of an ambush bring chaos and fear that expose him and his drivers to a great deal of vulnerability.

If SGT Ross or his fellow drivers get lost in that moment of confusion, several factors can come into play—the convoy mission, attending to the wounded, attack or withdrawal from the threat, keeping up with the radio chatter—all while trying to dodge bullets in an attempt to keep the convoy from collapsing upon itself. SGT Ross and his drivers must make snap decisions about the best course of action. Soldiers must react to the threat while protecting themselves, their equipment and their cargo. All these concerns compete in the heat and terror of battle.

Initiatives that keep a convoy from collapsing upon itself, thus making it a bigger target, are now under way. Convoy Active Safety Technologies (CAST) is one of these initiatives. This system is designed to provide semiautonomous "leader-follower" capabilities for convoy operations. With CAST engaged, a vehicle drives itself. The lateral tracking of the vehicle and the interval gap between vehicles remains the same, thus avoiding the accordion effect of collapsing a convoy. This greatly limits the exposure of a large number of individuals, vehicles and cargo in the ambush kill zone.

* * *

While the above scenario is hypothetical, in fact CAST is already being developed to help save lives, equipment, cargo and money with a system that will not only augment convoy capabilities, but also strengthen and enhance

By CSM Gary R. Carpenter
U.S. Army retired

them in many ways. CAST offers vehicle commanders the flexibility to respond more quickly to any situation, including hostile force, or to be proactive enough to avoid potential danger. It is a technology designed to enhance the capabilities and safety of the support warfighter. CAST is one technology that will counter the threat. Indeed, CAST has caught the attention of the U.S. Marine Corps and other services; the acronym *CAST* has now evolved to become the Joint Convoy Active Safety System (JCASS).



Emergency stops inside the cab allow the driver to assume full control by depressing the red button, grasping the steering wheel, tapping a foot release or tapping the brake.

JCASS uses multiple sensors linked to mechanical apertures that provide semiautonomous technology that allows the vehicle to drive itself as it follows a lead vehicle. The system uses a series of cameras to ascertain necessary roadway and adjacent terrain features. An accompanying laser-based system is used to determine lead-vehicle velocity, direction and the distance between vehicles by extrapolating time differences between the vehicles. Each vehicle is equipped with a high-accuracy global positioning system tracking unit, which aids the convoy and provides convoy structure and misdirection data to operators.

The accuracy with which JCASS processes the data reduces the demand on the driver by allowing the support warfighter the advantage of greater visibility and situational awareness to gauge the immediate danger of the moment. By decreasing the driver's workload, JCASS multiplies soldiers' safety by allowing them to focus on the threat at hand.

This leader-follower concept was specifically designed for use in convoy operations. All vehicles in the convoy must be equipped with JCASS. Once the system is engaged by a soldier in the driver's seat of a "follower vehicle," the vehicle will—through a variety of sensors and steering, braking and throttle actuators—take over the tasks associated with driving the vehicle. Trucks with JCASS engaged will follow the lead vehicle in accordance with the parameters set up by the convoy commander based on lead-vehicle speed. JCASS will steer the follower vehicle in the same path set by the lead vehicle.

During JCASS convoy operations, the lead vehicle is manually operated and designates the operating speed and path for all autonomously controlled follow-on vehicles in the convoy. JCASS uses its sensors to monitor the gap distance between vehicles—as the speed increases, the gap distance increases for added safety and security. The follower vehicles autonomously speed up or slow down to correct the gap distance.

Multiple methods allow the driver to safely resume immediate and full control of the vehicle without losing control, direction or speed. When fielded, one of two releases will be used: tapping the brake (similar to turning off cruise control on a car) or pushing a mushroom button located on the dashboard in front of the driver. Either method will immediately disengage all JCASS functions and return full control of the vehicle to the driver. Although the driver is in command, JCASS augments that role by creating an atmosphere that enhances drivers' situational awareness, enabling drivers to pay greater attention to what is going on in the immediate area and to take protective action.

Lockheed Martin and the U.S. Army Tank-Automotive Research, Development and Engineering Center, in conjunction with the U.S. Army Combined Arms Support Command (CASCOM), conducted Warfighter Experiment 2 (WE#2) at the Nevada Automotive Test Center (NATC), Carson City, Nev., in October and November 2008. Drivers and leaders from the Nevada Army National Guard participated to provide realism and soldier feedback. Initial instruction was conducted in the classroom at Wabuska Base Camp, located about two hours south of Reno, to introduce the soldiers to JCASS, including a detailed briefing of the system.

Road networks used included those on NATC properties as well as roads coordinated through the Nevada Bureau of Land Management that are similar to the terrain in Iraq and Afghanistan. The purpose of the exercise was to determine the effects of JCASS on convoy integrity, local area security, user fatigue and workload while demonstrating high-speed, low-visibility automated convoy operations. This experiment supported the growing body of evidence that JCASS has the potential to provide increased survivability, battlespace awareness, and force protection to military convoys and line-haul operations.

JCASS was installed on the family of medium tactical vehicles cargo trucks and a truck tractor, line haul (M915A3) for the experiment. During the test, drivers were required to identify targets along the convoy route. Targets consisted of pipe bombs, Ivan silhouettes with lit cigarettes (at night), ammo cans, spent 155 mm cartridges, and a .50-cal-

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***CSM Gary R. Carpenter**, USA Ret., works for General Dynamics Information Technology at CASCOM Sustainment Battle Lab, Fort Lee, Va. He is the former CSM of 1st Battalion Ranger, 75th Infantry, 75th Ranger Regiment; 25th Infantry Division (L); U.S. Army Japan/IX Corps; and U.S. Army Pacific. A graduate of the U.S. Army Sergeants Major Academy, he is the honorary regimental sergeant major of the 75th Ranger Regiment.*

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War Fighter II participants, including soldiers from the Nevada Army National Guard, stand at ease before the Army Tank-Automotive Research, Development and Engineering Center vehicles.

iber machine-gun placement. These targets were identified 20 to 25 percent faster (about 10 meters earlier) with JCASS engaged—a significant advantage when encountering IEDs and other threats or obstacles.

The results in autonomous driving at night were remarkable. In the manual mode, drivers with night-vision devices (NVDs) were having problems maintaining the desired gap distance between vehicles due to the challenges of limited depth perception and peripheral vision. In the semiautonomous mode, the gap distance was not a problem, as vehicles maintained the gap based on speed; as the speed increased, the gap distance automatically increased to maintain a safe convoy environment at all times.

The test also included a vehicle insertion. A nonmilitary vehicle made its way into the convoy. It simulated the different types of vehicle a convoy commander could be in, an armored-up convoy security vehicle, and an unwanted intruder that inserted itself into the convoy and passed trucks one at a time. JCASS compensated for the intruder vehicle by slowing down enough to create a safe distance between vehicles, giving the driver and/or the convoy commander time to evaluate the situation and take appropriate action. The convoy continued in formation, maintaining proper convoy intervals and discipline while continually monitoring the intruder.

Clearly, JCASS is not a system that is in the theoretical or design stage. It is up and running and able to be instituted quickly and easily on existing truck fleets. The way convoys are dispatched in Iraq and Afghanistan combat zones today, even the most mundane and presumably safest trip can turn into a nightmare in a nanosecond.

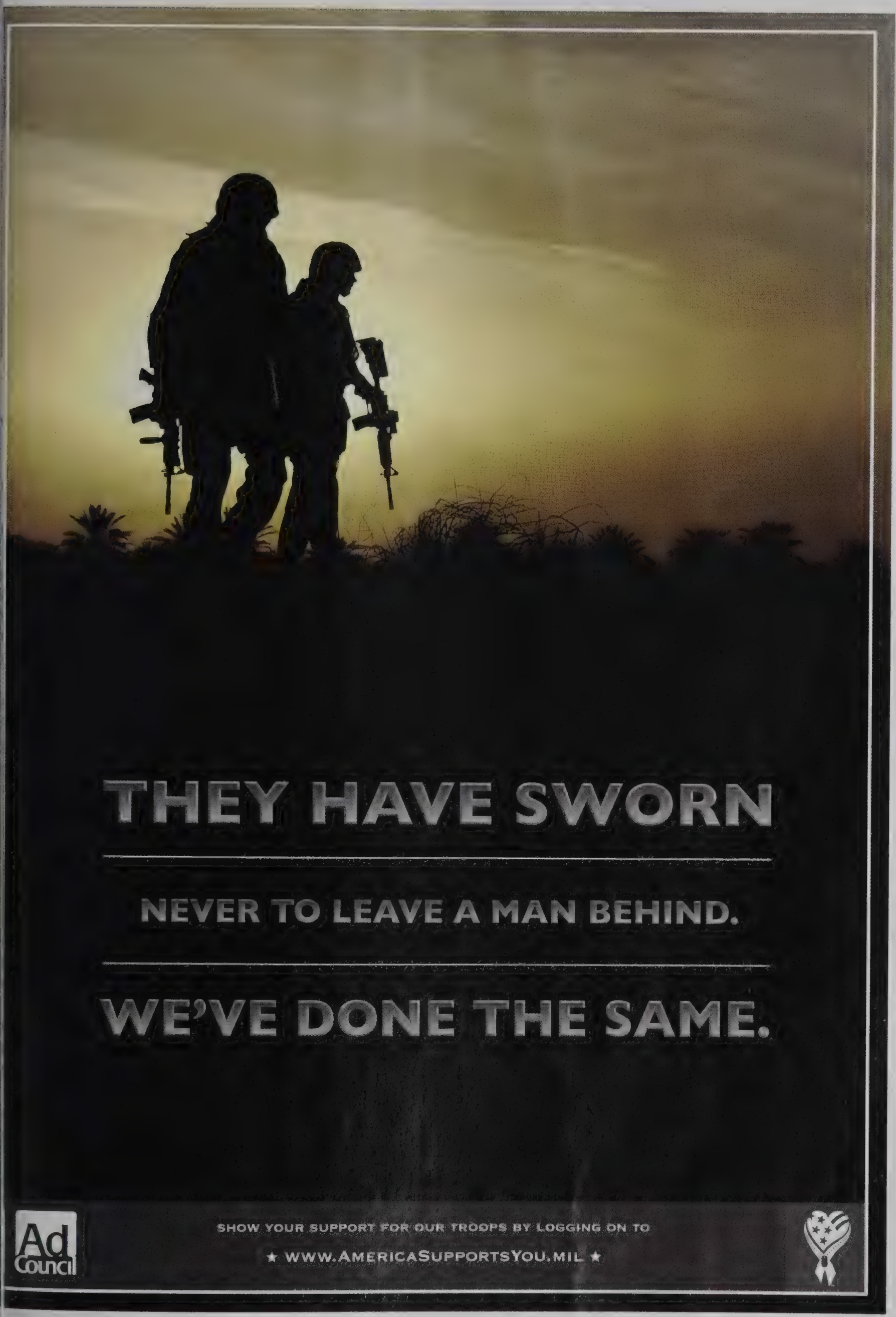
During the night phase of the test, the precision and the continuity of the convoy were no different from the daytime demonstration. Nighttime driving in a convoy is taxing on the driver. Maintaining sufficient gap intervals, not having to second-guess the lead driver about being on the correct road, maintaining proper speed, dealing with driver fatigue and wandering off the road as well as making emergency stops are areas in which many convoys run into trouble.

JCASS takes human errors—driver fatigue, distraction and so on—out of the equation. Also addressed during night driving is the ability to use NVDs with more confidence. Even though modern NVDs have improved from World War II and the Vietnam War, today such devices still narrow the field of vision, limit the periphery, and call for attention to detail to an extent that the wearer must evaluate the need to be on the road under such conditions. JCASS allows the flexibility to address the necessity to be on the road during such times.

JCASS eliminates, or at least greatly reduces, the response time to any given action, from braking slowly to a full emergency panic stop. JCASS is automatic, and when measured against driver reaction time, JCASS response time far exceeds the human reaction average. During WE#2, the smooth movement during acceleration or braking allowed the convoy to transition with an exact pacing precision similar to that of a train in motion.

The current fight takes us to a theater of operations where lack of cover is the norm. The Army may be engaged in this type of terrain for the indefinite future, and JCASS melds technology to mission demands. A very encouraging robotic system, its exactness offers an innovation that provides commanders the pragmatic flexibility of the many dynamics a convoy demands; it allows commanders to be prepared for and react to many more contingencies than ever before. Further improvements and system confidence acknowledged during the WE#2 testing resulted in a 93 percent reduction in the driver taking command of the vehicle. The greatest success came during night driving while under blackout conditions. In addition, maintaining proper gap interval distances decreases the possibility of rear-end collisions while in convoy. The U.S. Army Safety Center data on current rear-end collisions, no matter the theater, is eye-opening; JCASS virtually eliminates such injuries and losses, especially when it comes to emergency braking.

Even with modern technology, we face many of the same threats as in past wars and operations. We still face the possibility of losing our most valuable asset, the American warrior. Although JCASS will not eliminate this threat, it will provide another level of force protection that will enable warriors to get the needed supplies to the front. JCASS enables servicemembers to maintain their commitment while strengthening their resolve as peacekeepers. ★


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Women in Military Service

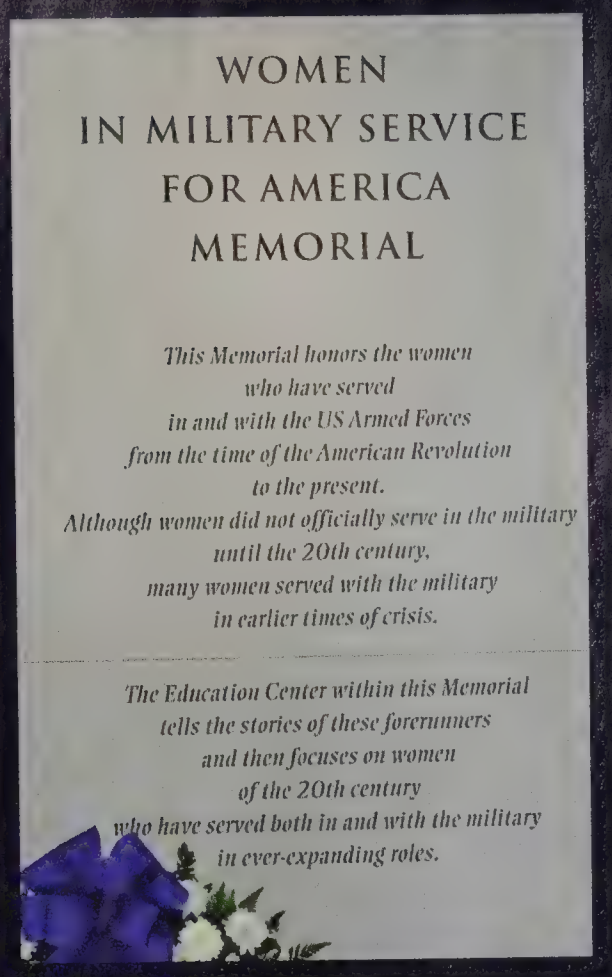
...or America Memorial

Photographs by Dennis Steele



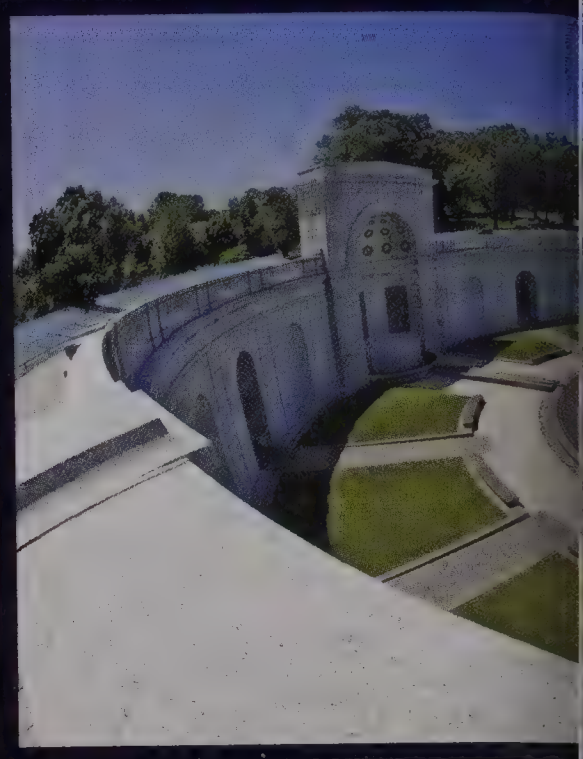
Dedicated on October 18, 1997, the Women in Military Service for America Memorial is the only major national memorial honoring all women who have defended America throughout history—documenting their experiences and relaying their achievements and sacrifices. Situated at the Ceremonial Entrance of Arlington National Cemetery on Memorial Drive and in direct line with the Lincoln Memorial, Washington Monument and U.S. Capitol, the Women's Memorial is the result of a restoration and transformation of the original Ceremonial Entrance, which was dedicated in 1932 and neglected during ensuing years.

A fountain and reflecting pool occupies



The entrance plaque notes the purpose of the memorial.

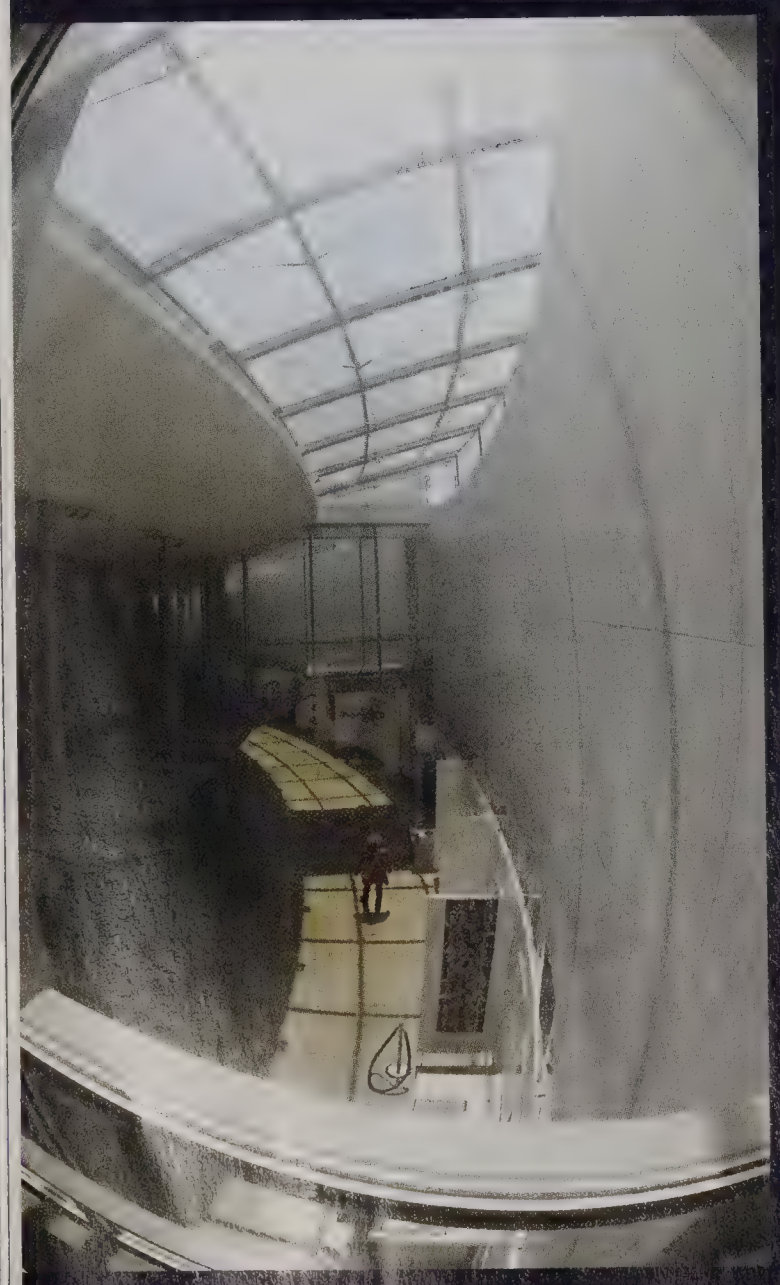




A fountain, left, occupies the center of the memorial's curved gateway, right.

the plaza in front of the curved gateway, and an arc of glass tablets crowns the upper terrace. Inside, visitors will find both permanent and special exhibits. The memorial boasts a unique collection of personal memorabilia from women who have served in America's military forces throughout the nation's history and also has a computerized registry of approximately 250,000 female veterans, which is continuously growing. More information about the registry and how to register a veteran, along with detailed information about the memorial, is available at www.womensmemorial.org.

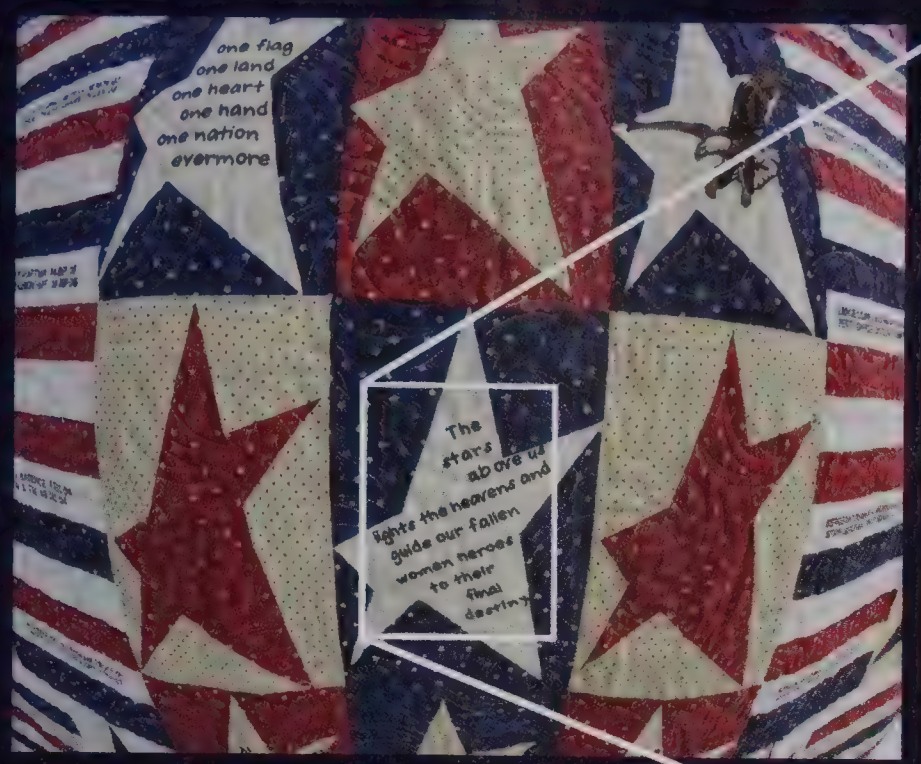
The Women in Military Service for America Memorial is open to the public without charge every day except Christmas Day from 8 A.M. to 5 P.M. (October 1 through March 31) and 8 A.M. to 7 P.M. (April 1 through September 30).





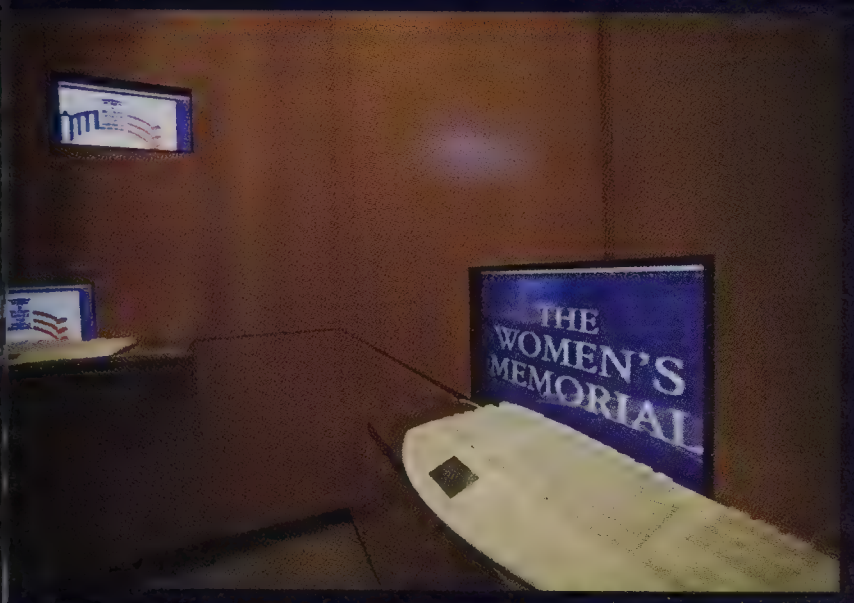
Left, a visitor tours the sunlit gallery. Right, a World War II aircraft model is suspended in the gallery as part of a special display commemorating the service of the Women Airforce Service Pilots.







The Fallen Military Women Quilt—a tribute to the women who have died in the war on terrorism—is decorated with the names of the fallen and messages of hope.



The Women's Memorial has a computerized registry of women veterans and currently offers information on approximately 250,000 women veterans.



A World War II display of uniforms and memorabilia is located in the memorial's main gallery.

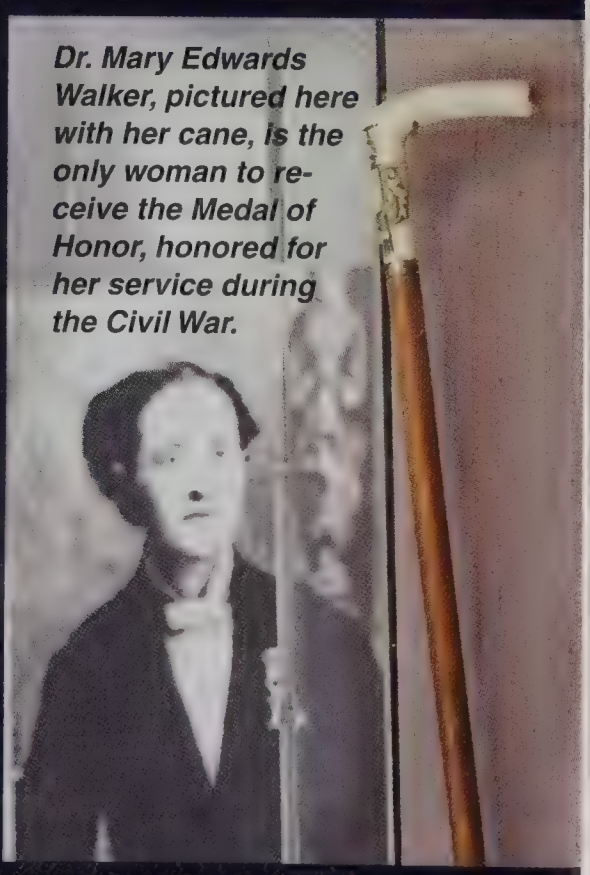




85th Evacuation Hospital arrives. Army nurses 1st Lt. Kathleen Gilluly, 1st Lt. Sharon Forman, 1st Lt. Mary Caspers, and 1st Lt. Joan Schwerman debarking from the USNS *Barrett*, 1965.



Left to right, identification tags, Vietnam War memorabilia and photographs of women serving in the U.S. military are among the displays.



Dr. Mary Edwards Walker, pictured here with her cane, is the only woman to receive the Medal of Honor, honored for her service during the Civil War.

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To: The Army Profession
From: Members of the CompanyCommand Forum

Leaders Describe How the Company Command Forum Makes a Difference

The CompanyCommand (CC) forum is a growing network of company commanders who are dedicated to the cause of exceptional leadership at the company level. Thousands of us are connecting in an ongoing conversation—sharing our hard-earned knowledge and experiences, becoming more effective and advancing our profession.

Over the last nine years, the Army's senior leaders—all past company commanders themselves—have been incredibly supportive of CC and other professional forums. They "get it" and want to maintain the grassroots, voluntary, by-and-for-the-profession nature that has made the forums so effective. Currently, the Army is seeking to expand the operating force and may draw from the generating force to make it happen. With this in mind, we recently asked members to share their real-life stories and concrete examples of how the CC forum has made a difference. What follows here is a small sample of the outpouring of feedback from leaders across the Army.

The day I stumbled across CompanyCommand, I realized ad found a gold mine. I utilized CC for EVERYTHING. My ial counselings came from there, at least their blueprints l: forms, memos, newsletter ideas (almost all of them), ining ideas, SOPs, TACSOPs, policy, regulatory refer-ces, solutions to problems, points of contact and so on. During and after deployment, I used CC to discuss my experiences in Iraq. It helped me relate to other commanders who had returned and had issues. It also helped me prepare those who were on their way over or already there. I attribute my success as a commander to CC. It was a critical tool in my development and sustainment as a leader. —*Jeremy*



During a 15-month deployment to Iraq as a platoon leader, the content of PL/CC guided me through numerous challenges that I would have struggled through on my own. When I lost Soldiers, people on the forum could relate, offer encouragement and suggest courses of action. When I struggled with relationships with my NCOs, I found leaders who could relate and offer advice. When 15 months stretched on and tested my will to endure, I could post my struggles and, without ever meeting the respondents, overcome the challenge. —*Ryan*

A little less than two years ago, I was informed I would be taking command of an HHC in a Stryker Infantry Battalion. I had limited experience regarding HHC operations and the mission set that comes with them. Luckily, I have a command group that supports me and a 1SG who will not

CPT Jeremy Banta, who commanded the 1485th Transportation Company in Iraq, credits the CC forum as "a critical tool in [his] development and sustainment as a leader."



CPT Lorilyn Woods, commander of B/1-10 ATK aviation, credits the CompanyCommand "Supply" topic with helping her start her command "on exactly the right foot."

allow failure. But I needed something more. I needed to discuss my questions and concerns with my peers. I needed to find and connect to the countless HHC commanders, past and present, and draw on their knowledge. I found that in CompanyCommand. *—Matt, from Iraq*

I had very little time to prepare for command, yet after my change-of-command inventories, I was told that I had started off on exactly the right foot. Everything I did in my inventories was an idea I got from the "Supply" topic in the forum. It saved me countless hours of research and saved me from making critical mistakes. Because I knew where to download the TMs and could figure out what components were required for each item, I was able to identify our shortages and order the missing parts. We deployed three months later with everything we needed. The forum was a one-stop shop to figure out what I needed to know and consider. *—Lorilyn, from Iraq*

The CC forum has given me a laboratory to test theories, a sounding board for ideas and a support group of peers larger than I ever could have had without it. Not only have I used things that I have seen and talked about in the forum in training for combat, I have used them in combat, with success. The stories and scenarios available in the forum have allowed me to think through situations before I faced them. Even better, I placed my platoon leaders into situations that they were able to think about prior to and during deployment. The forum saves lives on a daily basis. *—Scott*

CPT Scott Shaw (left), with 1SG Terry Sutton, used the CC forum to educate himself and his platoon leaders before and during their deployment.

In the CC forum, I can ask questions without fear of ridicule or judgment. I can voice opinions I would never share face-to-face with a field grade. I am among peers who also share my thoughts and feelings and cannot express those thoughts in other venues. In addition, company-level leaders have been through a lot of life-changing events during deployments in the last few years. Many of us deal with those issues on a routine basis. The CC forum is a link to others who know, understand and appreciate our struggles from war. Just knowing that others out there have had similar experiences and how they are moving forward is comforting and provides strength to continue to lead. *—Joan*

During OEF VIII, I was contacted by four different lieutenants and captains who were coming into our battle space with different units. Every single one of these officers found out who I was and what I did through MilSpace. They were able to touch base with me months before they deployed, and I was able to establish NIPR and SIPR lines of communication to share information or put them in contact with the commander in the area they were going to. More importantly, I was able to provide my perspective as the battlespace owner of what the INTSUMs and OPSUMs I was sending them were saying. When these officers arrived in my AO, they were much better prepared, and made RIP/TOA easier. In other words, they showed up to the fight current and relevant. *—Jason*

While working with other Coalition forces, I saw that they do something that we fail to do as an Army: provide a place for leaders to interact. The Brits, for example, provide places for leaders to share their experiences and have regular events for morale and unit cohesion. Yes, we have FOB-level MWR areas, and SPAWAR has been pushed down to the squad level. But the most acceptable interaction for American Soldiers seems to be playing a video game or watching a movie in your CHU.



What is MilSpace?

Some of the CC members here refer to MilSpace. MilSpace is the online ecosystem for professional learning and development that includes CC, PL, ProReading, LeaderCast, LeaderChallenge and eventually MilSpace Tracker. Users may enter the MilSpace system by joining the PlatoonLeader and/or the CompanyCommand professional forums. Members then gain access to additional capabilities and resources like their personal area (dog tag) and the ProReading forum (http://ProReading.army.mil). LeaderCast is a brand new place for video clips of leaders talking about their experiences, and LeaderChallenge v3 will launch in September. The MilSpace team also takes responsibility for monthly articles in ARMY and for other projects such as the MCCC Yearbooks, the *Afghan Commander AAR Book,* the *Iraq Commander AAR Book* and *A Platoon Leader's Tour*—all possible because of a ground-swell of Army officers who are on a mission to share their knowledge, learn from others and advance our profession.

CompanyCommand is a place to connect with fellow officers who are willing to share their lessons learned for the benefit of everyone. In garrison, there are no O-clubs on many posts. There are few right-arm nights. I have been to the hail-and-farewell in the last three years. Developmental counseling does not happen because of OPTEMPO or apathy, and being counseled by a field grade who is not in my MOS doesn't help me understand my career path. CC is the only professional community left for people interested in the art and craft of being a leader. *—Anonymous, from Iraq*

Upon my return from Iraq as a company commander in 2004, I was looking for a way to reach out and share my experiences with others. My greatest concern was passing on relevant lessons learned that were not getting to those Soldiers currently training for deployment because of the time it takes for our organization to adapt as a whole. With CompanyCommand, I was able to contribute and connect with leaders going into training for deployment, those already in theater and those who had already been there. In terms of professional interaction with my peers, the professional experience was second to none, save my Captains Career Course at Fort Benning, Ga. *—Wes, from Iraq*

I am an HHC commander currently at FOB Warrior, Iraq. I have been in command for about 14 months, and every step of the way the CompanyCommand forum has been an unquestionable resource—not only for me as a commander trying to do the right thing, but also for my Soldiers, who are affected by my decisions. My unit has deployed twice in three years, and with each rotation, a vast amount of knowledge and tracking products has been lost due to leadership changes and new bans on media that units have come to rely on. I was not lost, thanks to the enormous amount of memorandums, policy letters and products available on MilSpace. CompanyCommand has saved me more often than I can count. In addition, I used PlatoonLeader as a platoon leader in Korea. I do not know how I would have made a new platoon from scratch during the 2nd Infantry Division's transformation if I had not had this resource to help me. MilSpace has become more than just a web site. It travels with you when you're away from the flagpole and in a new unit. It is our continuity in a time of increased OPTEMPO. *—Jessica, from Iraq*

I have known now for about eight months that I would be deploying to Afghanistan. Only a few Soldiers in my company have experience in that theater of operations, leaving a significant knowledge gap during our preparation phase. The *Afghan Commander AAR Book* gave me and my platoon leaders an opportunity to orient our efforts effectively. We discussed it in an OPD forum and extracted all of the pertinent lessons learned. Today, two days prior to my movement, I feel that we are prepared and ready to go. *—Adam*

My husband and I are dual military, and both of us have deployed, my husband to Iraq while in command of a company. One thing I'll say for the forum is that it was an outlet for coping as much as it was a resource for learning. My husband thought he did everything right upon redeployment. He got debriefed, he filled out the mental health surveys, he helped his Soldiers deal with family issues, he took the classes for reintegration training, you name it. He thought everything would be perfect since he checked all the blocks. He was wrong. It caught him off guard, but he had a few episodes that made it clear to him something was wrong. He



CPT Jessica Jaccard-Gordon is currently commanding HHC, 15th BSB of the 2nd BCT, 1st Cavalry Division, in Iraq. She considers the MilSpace forums to be junior officers' "continuity in a time of increased OPTEMPO."

CompanyCommand Glossary

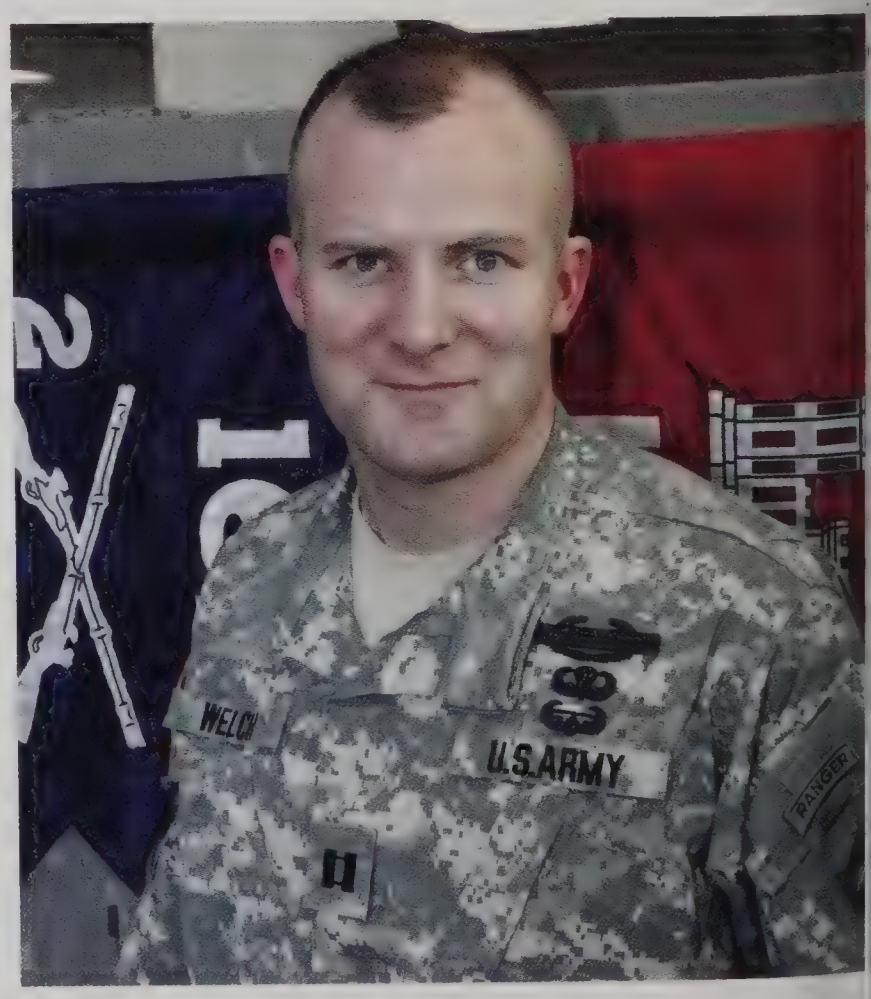
AAR—after action review.
AIT—advanced individual training.
AO—area of operations.
AR—Army regulation.
ASB—aviation support battalion.
CC/PL—CompanyCommand and PlatoonLeader forums.
CHU—containerized housing unit.
COIN—counterinsurgency.
ESB—expeditionary signal battalion.
FM—field manual.
FRG—family readiness group.
FSC—forward support company.
HHC—headquarters and headquarters company.
INTSUM—intelligence summary.
IOBC—Infantry Officer Basic Course.
ITSB—integrated theater signal battalion.
KFOR—Kosovo Force.
MCCC—Maneuver Captain's Career Course.
MWR—morale, welfare and recreation.
NIPR—nonsecure Internet protocol router.
OEF—Operation Enduring Freedom.
OPD—officer professional development.
OPSEC—operations security.
OPSUM—operational summary.
OPTEMPO—operational tempo.
PHA—personal health assessment.
PT—physical training.
RIP/TOA—relief in place/transfer of authority.
SASO—stability and support operations.
SBCT—Stryker brigade combat team.
SIPR—secure Internet protocol router.
SOP—standard operating procedure.
SPAWAR—Internet and phone access for U.S. and Coalition forces throughout Iraq.
SSA—supply support activity.
TACSOP—tactical standard operating procedure.
TM—technical manual.
TRADOC—Training and Doctrine Command.
TTP—tactics, techniques and procedures.
UCMJ—Uniform Code of Military Justice.
XO—executive officer.

did seek mental counseling, but that didn't seem to be quite enough to make him feel better. What he needed was an outlet to tell his own story, to feel like he was valuable to the fight again, and more than anything to be heard by other Soldiers who understood where he was coming from. He got that in the CompanyCommand forum. He started volunteering more and more on the site and participating in forum discussions. The changes I saw in him, as his wife and as a fellow Soldier, were dramatic. He found strength in sharing his hard-learned lessons with young officers, and they appreciated his enthusiasm, wisdom and confidence.

I don't want to exaggerate, but the CompanyCommand forum brought my husband back to 110 percent as a Soldier. Now during those evenings in front of the TV, I don't mind at all that he's typing away on a forum topic instead of watching a "chick flick" with me—CompanyCommand keeps him participating in the fight just enough so that he doesn't feel useless back at home station. *—Anonymous*

CompanyCommand, along with *Taking the Guidon,* was the cornerstone of my two company commands. To be totally forthright, I was not self-assured enough going into command to solicit information via CC. What I did, and what helped me tremendously, was browse posts and conversations regarding whatever subject concerned me at the time. I garnered much more information than I could have ever amassed via conversations, mentor talk, peer talk and subordinate feedback. CC provided me tools to use and examples of practica applications to avoid pitfalls. CC is MISSION ESSENTIAL t each and every officer who desires to improve understandin in our everchanging profession of arms. *—Hammer*

My company is presently a landowner in western Ab Ghraib. I began visiting the MilSpace forums in 2000, whil a sophomore at Penn State and a member of ROTC. came to rely on the PlatoonLeader web site to prepare fo



CPT W.W. (Hammer) Welch, a MacArthur Leadership Award recipient, says the CC forum was "the cornerstone" of his two company commands—C/2-126 IN and HHC/1249 EN.



CPT Paolo Sica (right), commander of C/2-112 IN, drinks chai with reconnaissance platoon leader 1LT Max Furman in Iraq. CPT Sica has been an active participant in MilSpace forums since he was an ROTC cadet and considers them "simply irreplaceable."

BC and answer the myriad questions a cadet considers. early 2003, I used PlatoonLeader to piece together a ri- platoon TACSOP for use in KFOR5A, when SASO doc- ne was still a moving target and before COIN was resur- cted. In 2008, I used CompanyCommand to connect with ellow member, Brent Clemmer, who helped me develop COIN-era Stryker Infantry Company TACSOP for use in F 09-11. MilSpace is simply irreplaceable by any number privately operated web sites, given OPSEC regulations. as no equivalent. *—Paolo, from Iraq*

During OIF III, I was deployed under a commander who s a very hard charger, to say the least. We were strung t hard—my platoon sergeant and I pulled 36-hour shifts e or two times a week just to ensure minimum manning s accomplished for our platoon's tasks. It was a low int for me in my military career, and I needed to see that her this is the way life is in the Army, or this isn't the way is in the Army—there is a better way. When I joined mpanyCommand, I was immediately immersed in a bet- way of doing business, and the thought of being able to plement what I learned allowed me to stay focused ough that deployment.

When I returned to Iraq with my own company, Company- mmand was right there supporting my premobilization D goals by supplying *Taking the Guidon* for each of my cers. This seemingly simple act allowed a team to be built d common ground established for working through the de- yment as a leadership team. Throughout my second de- yment, I visited CompanyCommand for info on everything m maintenance SOPs to UCMJ actions and always found information I needed or was linked up with the subject tter expert. Anyone can read the info in a regulation or d manual, but it takes someone putting it into common ms and practical applications to really get information to w properly, which is exactly what CompanyCommand es. I see no end to my use of CompanyCommand. It has ilitated my ability to command successfully twice pre- CC. *—Joshua*

The CompanyCommand forum has been a wonderful tool in my "commander's toolbox." I am a commander in the National Guard in the only Signal unit in the state. Having access to Signal captains nationwide as well as to other commanders in trigger-puller branches has allowed me to gain insight I might not otherwise have in dealing with personnel issues, SOPs, counselings, physical fitness issues, PHA issues and so on. This forum allows me to get outside advice in order to maintain perspective on issues. *—Russell*

The CC and PL forums allow for networking and self-sought professional development. What I enjoy about these forums is all the great outside-the-box ideas all over these web sites—suggestions and recommendations that go beyond institutional learning. The forums have allowed me to interact with peers who have gone through similar situations or who are currently on the ground (for example, in Iraq), and they are able to share their best practices and eyes-on-the-objective experiences. Both the CC and PL web sites allow access to the expertise of officers stationed all over the world with just a few clicks of the keyboard. It is truly phenomenal. *—Gloria, from Iraq*

I am still not totally sold on Internet social networking, but I do know a few things about CompanyCommand. I used it as a young lieutenant to see how and what current captains were doing. I used it as a staff officer at both the battalion and brigade combat team levels to understand what my peers needed and how I could help them better. I also used it to mourn the loss of friends who had died in battle. Most of all, I used the CC forum for answers—answers not found in any AR, FM, TM or publication; answers never taught to me by any leader or class; answers to questions such as: What do you do when a Soldier under your command dies? How do you get through a 15-month deployment when you are separated from your family? How do you keep it together as a commander when the going gets tough so you don't let your Soldiers down? Even though I had never kept a journal, I had the privilege of maintaining a Commander's Blog on the CC forum for about seven months while deployed in 2006–07; it was a way to vent, receive reality checks from peers and receive advice from past commanders. This made such an impression on me that I am now volunteering my time to assist in running the forum. *—Jason*





From CPT Robert DeMarquez in Afghanistan (left) to CPT George Coleman in Iraq (right), company commanders rely on the CC forum for professional development. CPT Coleman, who utilized the CC forum during 54 months of command that spanned two companies and two deployments, now interacts in CC with less experienced commanders to share what he learned.

This is how our generation communicates—with speed, immediate feedback and innovation—while still grounded in the fundamentals of doctrine and years of lessons learned. *—Aaron*

From checklists to lessons learned, from TTPs to administrative helps and shortcuts, nothing even comes close to providing what this site does. *—Nate*

The CC forum is needed because we are an Army at war and some questions just aren't covered in the field manuals. *—Todd*

Just today I finished my command, and I have to say that CC was *the* tool that helped me step off on the right foot with command. *—Chris*

The best thing this web site does is allow us as commanders to learn from each other and to form connections that we otherwise wouldn't be able to have. *—Robin*

As a National Guard soldier with a full-time civilian career, I must rely even more on online networking tools such as CC for professional development. *—Roberto*

I find solace in the fact that someone somewhere has been in my spot and is willing to help complete strangers do better. The value of having a one-stop location for this information is immeasurable. *—Patrick*

The MilSpace platform is far more interactive and timely than the countless professional journals. Plus, I can access these sites from anywhere in the world, and they don't take up any space in my rucksack. *—Matt*

I find that I use CC forum the same way my wife uses Facebook. I check it first thing in the morning and again throughout the day. *—George*

Dedicated professionals have always learned from and with each other. If you are a currently commissioned officer who is passionate about growing and leading combat-effective platoons or companies, join us at http://PL.army.mil or http://CC.army.mil. Encourage your FRG leaders to participate in their forum at http://FRG.army.mil. If you are an Army professional in a different practice, check out https://forums.bcks.army.mil and find your forum.

Connecting in conversation...

...becoming more effective.



Art by Jody Harmon

Have you joined your forum?

Soldier Armed

Stryker Update

By Scott R. Gourley

As the U.S. Army's Stryker family of vehicles approaches the sixth niversary of its initial combat deoyment, government and industry presentatives are continuing to delop and field a number of enhanceents designed to increase the survivbility and tactical flexibility of the hicles for Army warfighters.



Soldiers from the 2nd Stryker Cavalry Regiment board their Stryker after a dismounted patrol in Sadr City, a district of Baghdad, Iraq; a remote camera system will field soon, increasing soldiers' situational awareness as they exit and enter the vehicles.

According to Wendy Staiger, Stryker ogram director at General Dynam- Land Systems (the prime contrac- for the Stryker), many of the ongog efforts have been designed and veloped to meet emerging requirents generated by users in the field.

Staiger pointed to the new Stryker ast mitigation kit, which she deribed as "focused on improving the rvivability from a mine blast underath the vehicle."

"That particular kit is composed of ır components, with all of the components working together to improve the crew survivability in the event of a blast," she said. The first component of the kit is a new "belly armor" design. "That's additional armor that goes on the bottom of the vehicle to protect the crew compartment," Staiger explained. "Previously, we had introduced something called the driver's enhancement kit, which really covered the driver forward. This new kit starts where the driver's kit ends and goes back through the rest of the compartment. So that's basically more steel."

"The next thing within the kit is replacement of the floor plates with new ones that also improve the performance of the vehicle after a blast," she said. "In order for the kit to work, we have added the capability within the vehicle to *increase* the distance between the vehicle and the ground. We do that with our height management system, where we can raise it up, and at the end of the day that equals better protection."

The fourth element of the new kit involves the installation of new blast mitigation seats. "A lot of the injuries that soldiers have seen in the field are really related to what happens in the blast," Staiger said. "The new seats are basically cantilevered from the side of the vehicle, and what they do is attenuate the blast: They absorb the blast 'going up' and they control the descent [of the seat] coming down. That will lessen the risk of spinal compression injuries and also address such injuries as broken ankles and those you might see when those seats are coming back down."

Noting that the new seats are just being deployed, she said, "We actually just completed the retrofit of the first unit. We're under contract with the government to provide five brigades with this kit, and we are also under contract to cut portions of the kit into production so that future retrofit will be easier in the field."

Another new Stryker enhancement kit addressing an identified field need is the remote camera system. Displayed at the 2008 AUSA Annual Meeting, the kit joins a camera into the taillight of the Stryker vehicle. "It gives you vision outside the vehicle, around the area where the ramp goes down," Staiger noted. "For the soldiers inside, the most critical point of the operation is when that ramp first goes down. This will give them more situational awareness."

Although the remote camera requirement originally came from the medical community for their Stryker medical evacuation vehicle (MEV), Staiger said that the tactical enhancements resulting from the camera design have led to its adoption for all of the vehicles. "We should start seeing this particular kit going into vehicles this month as they get ready to deploy," she said.

Another new enhancement kit is an external lighting kit. "It is now fully under contract, and we are just



U.S. Army/SGT Brian Tierce

A Stryker combat vehicle from 2nd Battalion, 112th Infantry Regiment, prepares to roll out on a mission in western Baghdad. Slat armor—the metal-frame cage—was an early Stryker survivability upgrade; it deflects explosive rounds ahead of the vehicle.

working on the material to put it out there," Staiger said.

"Those are just a couple of the enhancement kits," she said. "We are under contract with the government for a number of these kits, and I don't know that a month goes by when we are not asked to make additional kits to try to meet emerging requirements from the field."

In addition to those fleetwide enhancements, other new kits in development focus on specific vehicle variants. One example of this variant-specific upgrade is a removable firing pin capability for the Stryker mortar variant. The new kit—prompted by issues discovered with dismounted mortars, never in the Stryker—allows the crew to remove the firing pin so that there could be no chance of a "stuck round" going off. The first 37 safety-enhanced tubes were sent to 2nd Brigade, 25th Infantry Division, in June, with that capability scheduled to enter the field by late July.

In addition to the individual kit enhancements, government and industry planners have also taken a larger programmatic look at the complete spectrum of potential enhancement packages for the Stryker system. A significant milestone in this holistic approach occurred in June 2008, when General Dynamics Land Systems, in support of the U.S. Army Program Management Office Stryker Brigade Combat Team (BCT), hosted a Stryker product improvement program (S-PIP) technology day and request for information. The S-PIP day focused "on design concepts and material solutions" that could satisfy the Stryker capability development document requirements.

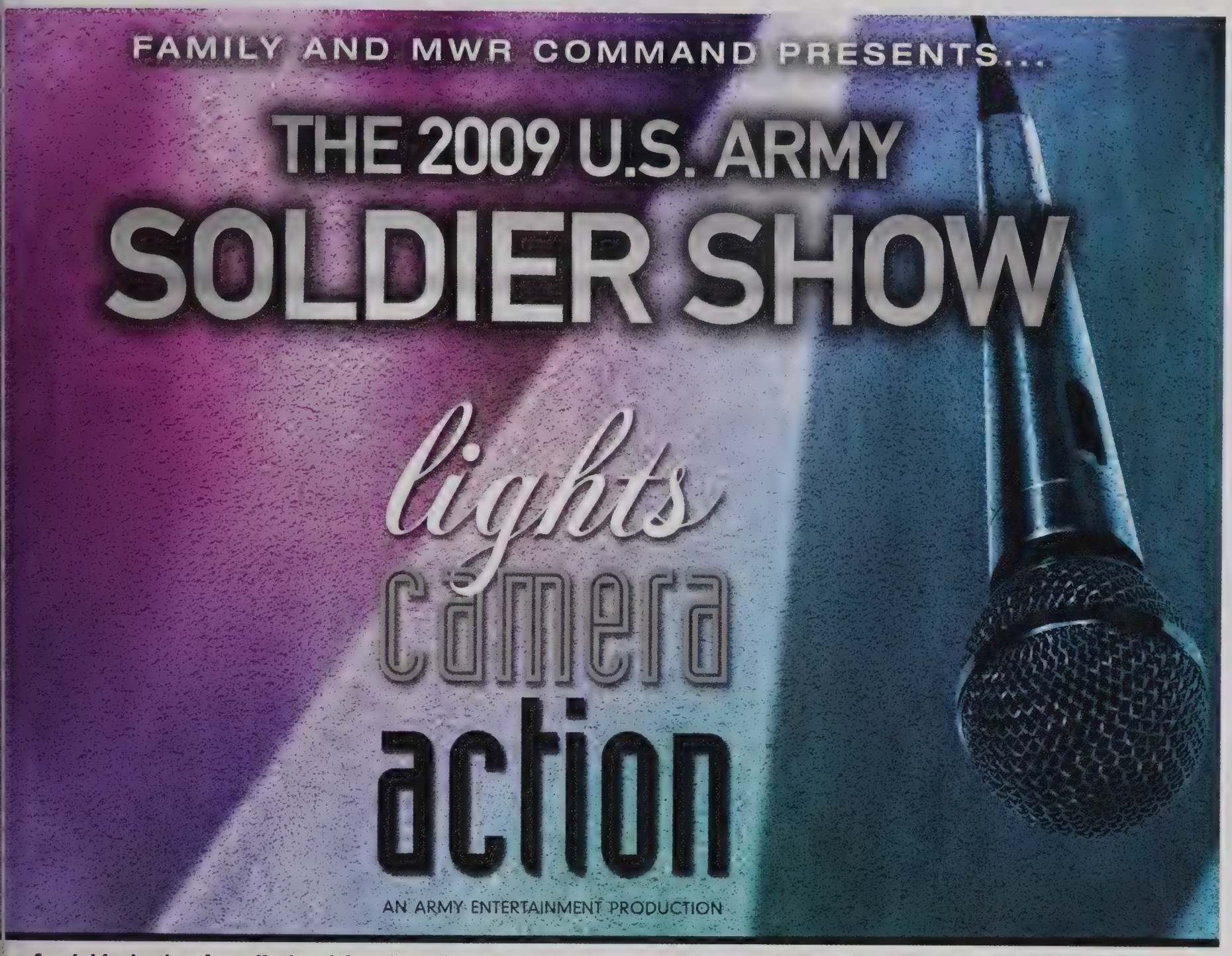
Looking back at those efforts over the past year, Staiger observed, "There's still a lot going on in the S-PIP world. If you take all of those capabilities, there are more than a billion potential combinations that you could put together from a value-added standpoint of what Stryker modernization is going to be. We have completed that initial trade study with the government, and we are in the process now of working with them to put the next phase of S-PIP under contract, which will take us to a preliminary design review."

In addition to the enhancement efforts within the Stryker BCTs, Staiger acknowledged considerable program excitement over the broader fielding of Stryker MEV variants.

"The MEV is going to see its first deployment very shortly with the 3rd Heavy Brigade Combat Team, 3rd Infantry Division. That really represents, from our standpoint, the first Stryker in a heavy brigade combat team. We are very excited about the MEVs. The crews are excited. They just finished up a National Training Center rotation and they are going to go to port, get these kits installed, do a quick train-up and then deploy for the first time with a heavy brigade," she said. "There's so much going on with Stryker every day." ★



A remote camera that attaches to the round Stryker taillight allows the vehicle's occupants to survey conditions outside the vehicle before they lower the exit ramp.



Special Invitation: Army National Guard and Army Reserve members - Bring your FAMILIES and your CIVILIAN EMPLOYER!

Fort Knox	July 1 – 7 p.m.
Fort Knox	July 2 – 2 p.m. and 7 p.m.
Fort Leonard Wood	July 4 – 7 p.m.
Red River Army Depot	July 7 – 7 p.m.
Fort Polk	July 10 – 7:30 p.m.
Fort Polk	July 11 – 7:30 p.m.
Fort Hood	July 23 – 7:30 p.m.
Fort Hood	July 24 – 2 & 7:30 p.m.
Fort Hood	July 25 – 2 & 7:30 p.m.
Fort Sam Houston	July 28 – 7 p.m
Fort Sill	July 31 – 7:30 p.m.
Fort Sill	Aug. 1 – 2 & 7:30 p.m.
Fort Sill	Aug. 2 – 2 p.m.
Fort Carson	Aug. 6 – 7 p.m.
Fort Carson	Aug. 7 – 7 p.m.
White Sands	Aug. 11 – 7 p.m.
White Sands	Aug. 12 – 1 & 6 p.m.
Fort Bliss	Aug. 14 – 7 p.m.
Fort Bliss	Aug. 15 – 2 p.m.
Fort Huachuca	Aug. 18 – 7 p.m.
Fort Huachuca	Aug. 19 – 2 & 7 p.m.
Fort Irwin	Aug. 22 – 7 p.m.
Fort Lewis	Aug. 28 – 2 & 7 p.m.
Fort Rucker	Sept. 30 – 7:30 p.m.
Fort Rucker	Oct. 1 – 11 & 7:30 p.m.
Fort Benning	Oct. 3 – 7 p.m.
Fort Stewart	Oct. 6 – 7 p.m.
Fort Stewart	Oct. 7 – 7 p.m.
Fort Bragg	Oct. 9 – 7 p.m.
Fort Bragg	Oct. 10 – 12 noon
Fort Drum	Oct. 14 – 6:30 p.m.
Fort Drum	Oct. 15 – 6:30 p.m.
Fort Hamilton	Oct. 16 – 8 p.m.
Fort Hamilton	Oct. 17 – 3 p.m.
USMA, West Point	Oct. 20 – 7 p.m.
Fort Monmouth	Oct. 22 – 1:30 & 6:30 p.m.
Fort Lee	Oct. 27 – 7 p.m.
Fort Lee	Oct. 28 – 2 & 7 p.m.
Aberdeen Proving Ground	Oct. 31 – 2 p.m.
Aberdeen Proving Ground	Nov. 1 – 2 & 7 p.m.
Fort Monroe	Nov. 4 – 2:30 p.m.
Picatinney AR	Nov. 6 – Time TBA
Fort Belvoir	Nov. 8 – 2 p.m.

*Schedule subject to change. Go to armymwr.com for the latest details.

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AUSA Sustaining Member Profile

Avion, Inc.

Corporate Structure—President: Gary W. Donald. Number of Employees: 150. Headquarters: 7067 Old Madison Pike, Suite 170, Huntsville, AL 35806. Telephone: 256-721-7006. Web site: www.avioninc.com.

Avion is a veteran-owned small business providing high-quality, specialized engineering, logistics, software development and technical services. Avion was created in response to the engineering, logistics and analytical needs of the Army Aviation community and has grown steadily since its inception in 1992.

Avion provides innovative solutions for technical and operational problems through the application of systems engineering, research, analysis and software-engineering technology. Avion has built its reputation on integrity and commitment to customer satisfaction; 2008 revenues totaled $20 million. In addition to the Huntsville office, Avion employees are stationed at Redstone Arsenal, Ala.; Fort Campbell, Ky.; Clarksville, Tenn.; Fort Hood, Texas; Fort Bragg, N.C.; Fort Rucker, Ala.; Corpus Christi, Texas; and St. Louis, Mo. Field teams are placed in active duty/reserve locations in and outside the continental United States.



Gary W. Donald, president, Avion, Inc.

Avion is privately held and is 100 percent employee-owned, with an employee stock ownership plan owning 32 percent, promoting long-term corporate ownership continuity and commitment to the company. Avion began its history with Army Aviation performing as the lead technical entity for the Critical Safety Item/New Source Testing (CSI/NST) program. This entailed fatigue, endurance and interchangeability testing of critical components purchased from unapproved/untested sources during the buildup to and duration of Operations Desert Shield and Desert Storm. Avion continues to support the CSI/NST program and has operated as the lead technical subcontractor on flight critical components and critical application items for the Research, Development and Engineering Command Aviation and Missile Research Development and Engineering Center (AMRDEC) Aviation Engineering Directorate since the program's inception. Avion contributes expert engineering, logistics and asset-management software-development technology to Army Aviation and specialized, non-DoD commercial sectors, offering small businesses flexibility, mobility, low overhead, competitive pricing and provision of cost-effective solutions. For example, Avion developed the Universal Static Balance Fixture and Virtual Master Blade technologies and the Composite Rotor Blade Restoration system (fluid removal processes); these technologies are the basis for new, separate companies.

Avion is highly respected for its solid business practices and commitment to American men and women in uniform, and to its AMRDEC, Program Executive Office Aviation, and Aviation and Missile Command customers. Avion supports a broad range of weapons systems (UAS, AH-64, C/MH-47, C/MH-60, MH-6, OH-58A/C/D, ARH, AH-1, UH-1 and fixed wing) as well as commercial sector clients, including NASCAR and law-enforcement entities.

Avion has enjoyed continued success throughout its 17 years of operation via provision of quality, dedicated, innovative and timely response to customer requirements. Avion personnel have strong expertise in Army Aviation, including the following areas.

- Aviation systems engineering: airworthiness qualification, flight safety risk reduction, systems integration.
- Rotorcraft aeromechanics: vibration reduction/vibration monitoring.
- Critical asset engineering management: CSI engineering testing/qualification.
- Manufacturing processes: product assurance, vendor oversight/qualification and technology improvement.
- Comprehensive life-cycle engineering and logistics analysis.
- Automation of the Army: time-sensitive, flight-critical 2410 and high-dollar asset-management tracking system at the command and depot levels.
- Enterprise asset management, technical data and configuration management.
- Software systems development/engineering.
- Automated information systems/automated identification technology (AIS/AIT) systems: supply and maintenance management automation.
- Integrated logistics services: global AIS/AIT implementation.
- Technology insertion.
- Reliability, availability and maintainability.
- System business process streamlining: operations and support cost reduction.

Applying parts-marking engineering and logistics expertise, Avion has developed asset-tracking applications (for example, laser marking, printed labels and so on) for Army tool room and aviation life support equipment (ALSE) marking and inventory management at the unit level. The company is currently developing analogous software technology to manage small-arms and sensitive-item inventories. These applications employ user identifier markings to meet DoD policy requirements and provide true benefit to the soldier in reduction of nonproductive man-hours. The tool room and ALSE management systems are web-based inventory and accountability management systems allowing visibility of equipment and tools through all transaction phases, including issue, turn-in, receipt, storage, calibration scheduling and maintenance requirements. These inventory management systems were developed to provide real-time information on the location and condition of military units' sensitive assets. Similar technology is being developed for tool marking, tracking and inventory management for NASCAR, municipal governments and industry. Avion is also developing software products to assist law-enforcement agencies in the tracking and management of prisoners, firearms, evidence, work-release and authorized vendors/visitors. This technology provides maximum prisoner control and reduces agency liability and officer workload.

New technology tools and advances are continuously being evaluated and employed by Avion—the result is maximum customer benefit. Over the years, Avion has provided engineering and logistics support, system development and rapid prototyping with one goal in mind—supporting the soldier. At its core, Avion remains a company committed to the basic principles of integrity, hard work and dedication to its customers.

Reviews

Giving Forgotten Commanders Their Due

tton's Peers: The Forgotten Allied Field Army Commanders of the Western Front, 1944–45. *John A. English. Stackpole Books. 368 pages; naps; black-and-white photographs; in-lex; $27.95.*

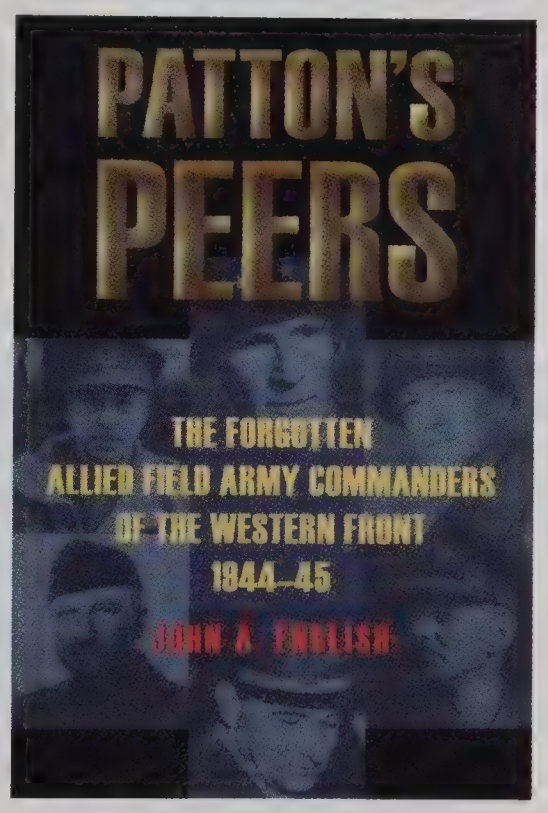
By COL Cole C. Kingseed
U.S. Army retired

n the last two years of the European war against the Third Reich, seven ied field armies bore the brunt of fighting on the Western Front. Of commanders of these forces, only N George S. Patton Jr., U.S. Third my, remains a household name 64 rs after the cessation of hostilities. e remaining six: GEN Henry (Harry) rar, First Canadian Army; GEN les Dempsey, British Second Army; N Courtney Hodges, U.S. First my; GEN William Simpson, U.S. th Army; GEN Alexander Patch, . Seventh Army; and GEN Jean de tre de Tassigny, French First Army, e been relegated to the footnotes of tory. In an effort to correct this im-ance, John A. English has produced asterful account of army-level com-nd in *Patton's Peers.*

nglish is a veteran military histo-n who served 37 years in the Cana-n Army. He has taught at Queen's iversity and the U.S. Naval War lege, and his previous works in-de *The Canadian Army and the Nor-ndy Campaign, Marching Though os* and *Lament for an Army.* His *On ntry,* the story of infantry combat in 20th century and its impact on the jor conflicts of our time, has long n recognized as a military classic.

n assessing the effectiveness of Pat-'s peers, English notes that all had ilar backgrounds with respect to ning and education. Each com-nder had compiled a distinguished ord of war service in World War I. served in the shadow of more il-rious predecessors before assuming army-level command in the next world war. In addition, all their appointments to senior command "depended on chance and patronage as much as military ability."

Then, as today, it was the responsibility of field army commanders to execute broadly stated tasks or missions assigned by group commanders. "Army-level responsibilities included determining objectives and priorities, developing plans and concepts of operations, and assigning achievable objectives to corps along with adequate resources to attain them." According to English, during the campaign of northwest Europe, none of the army-level commanders, as individuals, were indispensable since "the general staff system was designed to compensate for a commander's shortcomings, and a good staff could rescue a mediocre commander."



Of the commanders who led field armies on the Western Front in 1944–45, GEN Dempsey was the youngest and longest continuously serving field commander. Landing in Normandy on June 7, 1944, Dempsey directed the operations of the British Second Army for the remainder of the war. A modest man, Dempsey oversaw the fighting around Caen and in one week raced his army 250 miles to the east once the German line of resistance collapsed in August, outpacing even Patton's Third Army. Dempsey's textbook crossing of the Rhine in Operation Plunder in March 1945 served as his finest military offensive of the war.

As First Canadian Army commander, GEN Crerar was ever conscious that he followed in the footsteps of GEN Sir Arthur Currie, who led the celebrated Canadian Corps to victory in World War I.

The least resourceful of the army-level commanders in Europe, Crerar liberated the Channel ports, but he was fortunate to have in his service LTG Guy G. Simonds, Canada's most exceptional field commander, who successfully opened the Scheldt Estuary to shipping following the capture of Antwerp. Later in the war, Crerar directed nine British divisions and his own Canadian divisions, approximately half a million troops, in the Battle of the Rhineland.

Of the Commonwealth and French commanders, English gives highest marks to GEN de Lattre, who displayed great personal courage and inspirational leadership in carrying out such assigned tasks as reducing the Colmar pocket and crossing the Rhine River.

More than any other national commander, de Lattre viewed himself as the representative of his country more than the commander of one of its armies. The French zone of occupation that resulted at war's end "largely reflected the imprint of French boots already planted firmly on the ground."

ARMY readers will undoubtedly be more interested in Patton's American peers. Here, English sees more differences than similarities. GEN Hodges, commanding the U.S. First Army, does not fare as well as his contemporaries. Hodges served as then-LTG Omar Bradley's deputy commander on D-

Day. "A [GEN George C.] Marshall man among Marshall men," Hodges was a micromanager who lacked confidence in his corps commanders with the exception of VII Corps commanding general J. Lawton Collins. Given Hodges' lackluster performance in the fighting in the Huertgen Forest and the opening stages of the Ardennes Offensive, English states emphatically that Hodges' reputation as Eisenhower's "scintillating star" is totally unwarranted.

Ninth Army commander GEN Simpson, on the other hand, emerges as "the most forgotten American field army commander of the Western Front." Simpson received his position because Marshall wanted to assure generals who trained large formations back in the United States that they would not be excluded from leading field armies in combat. More competent than Hodges, English contends, Simpson remained in the shadow of the British too long because Army group commander Bradley assigned him to Field Marshal Bernard Montgomery's 21st Army Group for much of the fighting in northwest Europe.

Then-MG Alexander Patch, who commanded the Seventh Army, replaced Patton once Eisenhower transferred Patton to the United Kingdom in the spring of 1944. Patch, a veteran of the Pacific Theater, commanded a coalition army of American and French troops in the invasion of southern France in August 1944. Too closely associated with the Mediterranean Theater and with GEN Jacob Devers, whom Eisenhower detested, Patch never gained entrance to Operation Overlord's inner circle. Despite his success in eliminating the last big German offensive of the West in the close-quarters fighting of the Vosges region of southern France, Patch was largely forgotten and emerged from the war as the "most underrated general of the war."

In the final analysis, English gives these less heralded commanders their due.

***COL Cole C. Kingseed**, USA Ret., Ph.D.*
a former professor of history at the U.S. Military Academy, is a writer and consultant.

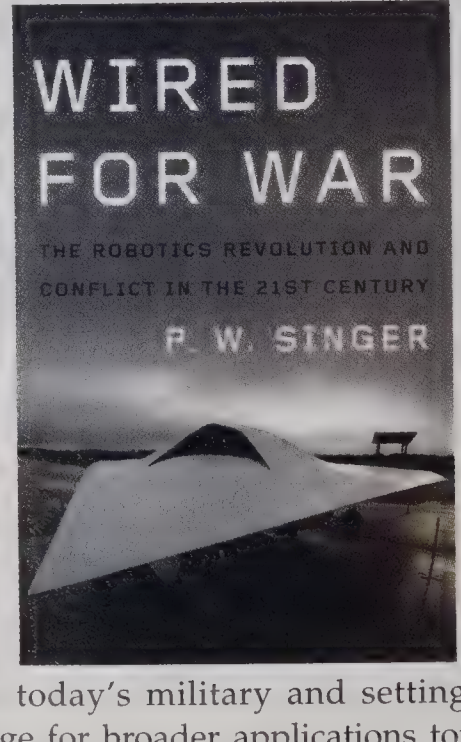
Varied Fare

Wired for War: The Robotics Revolution and Conflict in the 21st Century. *P.W. Singer. The Penguin Press. 499 pages; black-and-white photographs; index; $29.95.*

Engineers at Lawrence Livermore National Laboratory frequently offer a well-worn adage of modern research: "The problem with change is that things are different afterwards." Looking at the military robotics revolution now unfolding within and around the U.S. military, few would doubt that it represents one of the greatest changes of our time. And while many may embrace some of the early elements of that revolution, only a miniscule percentage have taken the time to study that change and speculate on how things might be different in the "afterwards" to come.

Fortunately, an excellent introduction to that study and speculation is now available in P.W. Singer's *Wired for War: The Robotics Revolution and Conflict in the 21st Century.* Including an understated acknowledgment that "war just won't be the same," Singer provides an extremely readable reference that attempts to recognize and convey the significance and potential ramifications of the expanding robotics revolution.

The story is told in two major sections. A foundation section provides a history of robots and robotics as well as a look at some of the recent and emerging technologies that are facilitating the application of these systems



for today's military and setting the stage for broader applications tomorrow. Based on that foundation, Singer then explores aspects of the resulting change, identifying a wide range of ethical, legal and psychological issues surrounding robotics.

For example, after arguing that it is robotics and not network-centric warfare that serves as the true cornerstone for today's revolution in military affairs, Singer then builds on that thinking to offer a "wide variety of new questions, concerns and dilemmas that will ripple out beyond the confines of the battlefield." While the combat exigencies of arming today's generation of unmanned aerial systems may cause some to ignore these longer-term considerations, Singer convincingly makes the case that many of these somewhat esoteric issues must be addressed as part of today's planning, development and fielding processes.

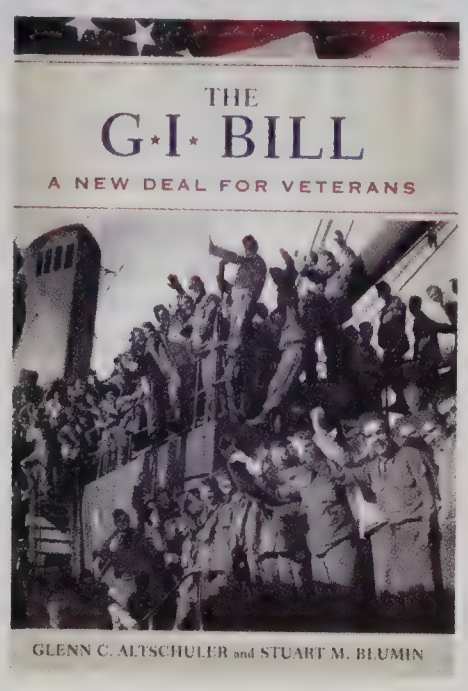
Serious military readers might be tempted to dismiss the significance of the book because of its periodic flippant readability (Who really cares if Singer believes that Ewoks and Jar Jar Binks "are to blame for the ruination of the *Star Wars* franchise"?) or its occasional lightweight treatment of some military applications (the frequent referencing of counter rocket artillery and mortar [C-RAM] ignores the most critical software and integration issues in favor of calling its limited Phalanx engagement component "R2-D2 in Baghdad"). The majority of the military coverage and discussion is superb, however, offering an excellent and long-overdue starting point for the critical robotics discussions, debates and decisions that need to take place today and continue into the future.

—Scott R. Gourley

e GI Bill: A New Deal for Veterans. *Glenn C. Altschuler and Stuart M. Blumin. Oxford University Press. 246 pages; black-and-white photographs/ illustrations; index; $24.95.*

The Servicemen's Readjustment Act 1944, commonly known as the GI l of Rights, is often credited with the e-20th-century booms in college ma- culation and home ownership, even th the overall success of the "Great- Generation." On a mission to "take bill outside of its shrine," *The GI Bill* ceeds in presenting a more balanced praisal of the groundbreaking legis- on, which authors Glenn Altschuler d Stuart Blumin dub the New Deal veterans.

Thoroughly researched (and with ny nods to Suzanne Mettler, author *Soldiers to Citizens: The G.I. Bill and the king of the Greatest Generation*), *The GI* methodically examines every aspect he act, from inception to passage. A cussion of the veterans' assistance s passed after the Civil War and rld War I provides stark contrast to generosity of the 1944 act. Best known for its college allowances, the bill offered a variety of other benefits, not all of which were as successful—the sub-college training programs intended for



those pursuing vocational education proved susceptible to graft, and in the early days of the bill, the VA home loans it sponsored required monthly payments much too high for the average veteran.

Altschuler and Blumin also assess the racial and gender biases of the bill's effects. The GI Bill itself was remarkable in its inclusion of *all* veterans, among them African-Americans and women. In practice, however, it was generally difficult for black veterans to obtain home loans, and female veterans accepting education benefits were not offered dependent allowances, as were men.

Despite its flaws, the bill allowed unprecedented funding for unemployment, housing, education and training. "By 1950," Altschuler and Blumin write, "the U.S. government had spent more money to educate veterans than it had on the Marshall Plan." Indeed, veterans' education benefits have never been so comprehensive in all the years since.

In presenting "the larger story of the GI Bill and its role in the shaping of postwar America," *The GI Bill*'s clear-eyed narrative balances the heady encomiums of recent years and provides an informative, thorough account of "a remarkable response to a critical moment in the nation's history" against which many measure the present.

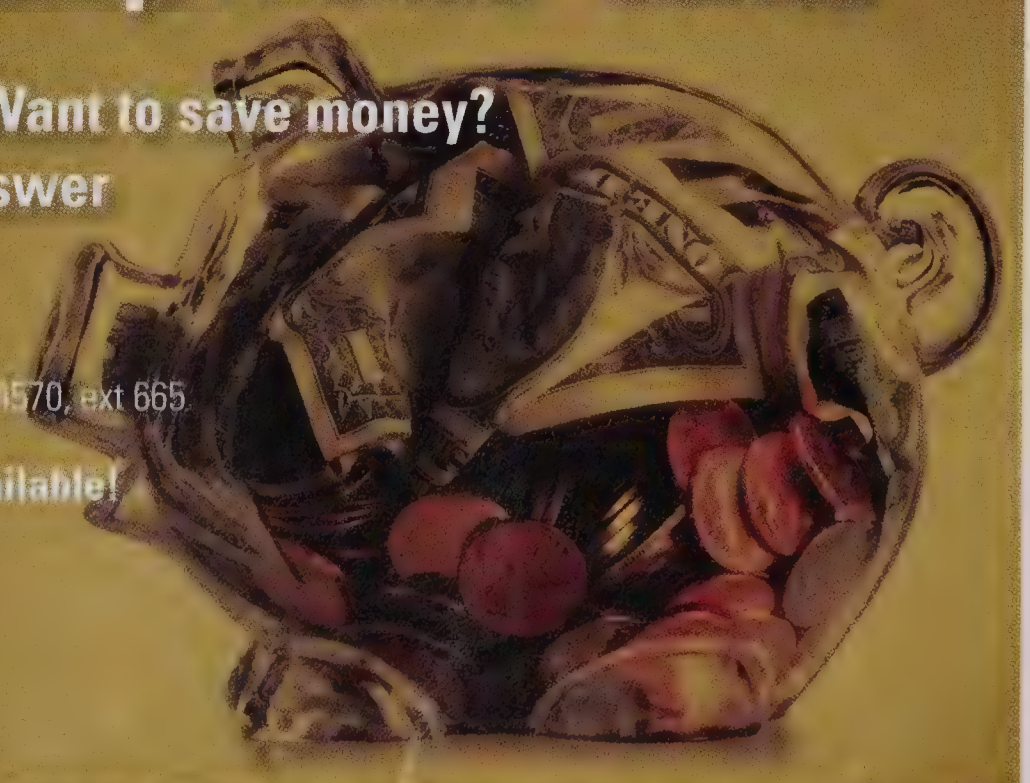
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Historically Speaking

King Henry VIII at 500

By BG John S. Brown
U.S. Army retired

n April 1509, Henry VIII was crowned King of England. In June, he married therine of Aragon, and in August he ocured an alliance with the Holy Roman Emperor Maxilian I. These three events secured the 17-year-old narch on a throne that started out wobbly at best. Those a certain age may remember Henry from high school tbooks as a fat old man who beheaded a lot of people, luding several of his wives. More recently, viewers of owtime's *The Tudors* have seen him as a slim young man siding over a sybaritic court and doing naughty things nself. Serious historians transcend such caricatures to see reign as pivotal for both his nation and the world. His nsolidation of feudal England into a national monarchy, ak with Roman Catholicism, facilitation of the Protestant formation and contributions to commercial revolution d far-reaching consequences. ARMY readers may also be erested in his contributions to America's military herge. Our militia tradition, our emphasis on maintaining technological advantage and our appreciation of the litary as a profession are significantly rooted in his reign.

Henry VIII was determined that after two generations t to domestic discord, England would once again be a jor player in European affairs. Much had changed dur; those two generations, however, and now England npeted considerably above its weight class. Henry ruled newhat fewer than 4 million subjects. His contemporary ncis I of France boasted more than 13 million. Charles V ed 15 million directly in Spain, Italy and the Netherds, and nominally ruled millions more as Holy Roman peror. Turn-of-the-century revenues for France were re than nine times greater than those of England, and arles V enjoyed custody of seemingly unlimited Aztec d Peruvian gold. What was worse, Henry's diplomacy—d family life—managed to alienate Francis, Charles and Papacy at much the same time. Britannia did not yet e the waves, a million Scots were hostile, and amphibi- or Scottish-assisted invasions of England were a recurt probability. In these crises, Henry revitalized militia ditions that dated back through Anglo-Saxon times.

Henry VIII reenergized militia during an era when conporary monarchs were moving away from such tradiis. Militia, by definition, puts arms in the hands of local izens. When organized, it contributes a sense of local emverment and autonomy. Self-confident militiamen insist such phenomena as the Rights of Englishmen. Henry's althier rivals avoided such an impediment to monarchial trol through increasing reliance upon standing armies paid professionals. Their vast populations paid taxes to port the relatively small numbers who actually fought. England offset its numerical disadvantage with a response that hearkened back to the feudal levies of yore.

Unlike earlier feudal levies, however, Henry's militia generally deployed under the effective control of the central government rather than of local magnates. Henry consolidated national political activity within his court and coopted the nobility into it. Over time, the autonomous power of the feudal barons had been broken, and their successors served the nation at the king's pleasure with responsibilities he determined. Thus the militia ideally represented trained and effective local military manpower that was readily available for national service. This leveled the odds against the more narrowly recruited forces potential invaders could project. In later times, a wealthier England would shift from reliance upon militia to favor a standing army. This was after militia traditions had already been transplanted to the North American frontier, however. In the American colonies, vast distances and thin manpower offered no viable security alternative. Militiamen evolved into our National Guard and Army Reserve soldiers, and profoundly affected national development with their own interpretations of the Rights of Englishmen.



Courtesy of the Yorck Project

King Henry VIII's investment in the English militia during the early 16th century has had an impact on the U.S. Army.



"The Embarkation of Henry VIII at Dover" depicts the most important warships in Henry VIII's navy, the Mary Rose *and her sister ship, the* Great Harry.

Henry VIII was a Renaissance enthusiast for military technology and perceived it as yet another way to offset numerical disadvantages. He completely overhauled England's coastal defenses, employing the latest designs and engineering to take advantage of artillery and to offset the artillery of opponents. His so-called device forts overwatched the amphibious approaches to England with thickened bulwarks resistant to artillery fire and positioned to deliver it. The matrix was so well placed that refortified versions have defended England time and again, including during World War II. Perhaps the most famous Henrician technological advance was the emplacement of large guns in the waists of ships firing through portholes that could be closed in rough weather. Ship-sinking broadsides soon replaced man-killing sniping as the appropriate use of maritime firepower. Enterprising English sailors perfected techniques to deliver devastating fires onto their enemies.

Henry's enthusiasm for maintaining a technological edge soon made its way across the Atlantic. Early examples include the Kentucky long rifle, the thoughtful design of such bastions as West Point and Henry Knox's artful use of purloined British artillery. Indeed, the founding of the U.S. Military Academy itself reflected a determination to sustain technological advantage. At the time, most thought frontier living itself would generate adequate supplies of infantrymen, cavalrymen and their leaders, but the science requisite for competent engineers and artillerymen required a special school with a rigorous curriculum.

Henry VIII believed that his newly designed mix of militia troops with royal leadership, royal troops and an emerging navy required a leadership caste we now characterize as professional. He commissioned the *Booke of Orders for the Warre both by Sea and Land* to instruct his son Edward, and resultant fermentation in the new age of printing did much to inspire a rising generation of military leaders. During Henry's reign, the "King's Ships" rose in number from seven to more than 50, and this number could be tripled by contracting and arming large merchantmen—the construction of which, in many cases, Henry subsidized at 5 pounds sterling a ton. Henry adopted the unusual policy of keeping a fraction of his fleet consistently at sea in peacetime to escort merchantmen, secure fishing fleets, suppress piracy and "show" his royal flag.

Continuous operations require continuous leadership, administration and support. Henry's Council for Marine Causes proved a nascent admiralty, and his Ordnance Office provided similar organizational services for ground forces. When Henry died, a modern military profession was not yet intact, but was in gestation. Our own founding fathers were ambivalent about military professionals, but ultimately saw the merits of at least having some, to which their founding of military academies at West Point and Annapolis attest.

The U.S. Army rightly celebrates June 14, 1775, as its birth date as a national institution. Most know that its heritage extends back even further. Important fragments of that heritage are at least 500 years old and were substantially shaped by a long-ago king who ruled a small kingdom an ocean away from us.

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: Army Transformation 1989–2005, *is forthcoming.*

Recommended Reading:

Hill, J.R., editor, and Bryan Ranft, *The Oxford Illustrated History of the Royal Navy* (New York: Oxford University Press, 1995)

Raymond, James, *Henry VIII's Military Revolution: The Armies of Sixteenth-Century Britain and Europe* (New York: Tauris Academic Studies, 2007)

Wilson, Derek, *A Brief History of Henry VIII* (Philadelphia, Penn.: Running Press, 2007)













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"The Truly Great" by Stephen Spender



Mary Blake French

When President Ronald Reagan stood at the site of the U.S. Ranger Monument at Pointe du Hoc on the 40th anniversary of D-Day, he talked about the bravery and courage of the Rangers:

Behind me is a memorial that symbolizes the Ranger daggers that were thrust into the top of these cliffs. And before me are the men who put them there.

These are the boys of Pointe du Hoc. These are the men who took the cliffs. These are the champions who helped free a continent. These are the heroes who helped end a war.

Gentlemen, I look at you and I think of the words of Stephen Spender's poem. You are men who in your "lives fought for life … And left the vivid air signed with your honor."


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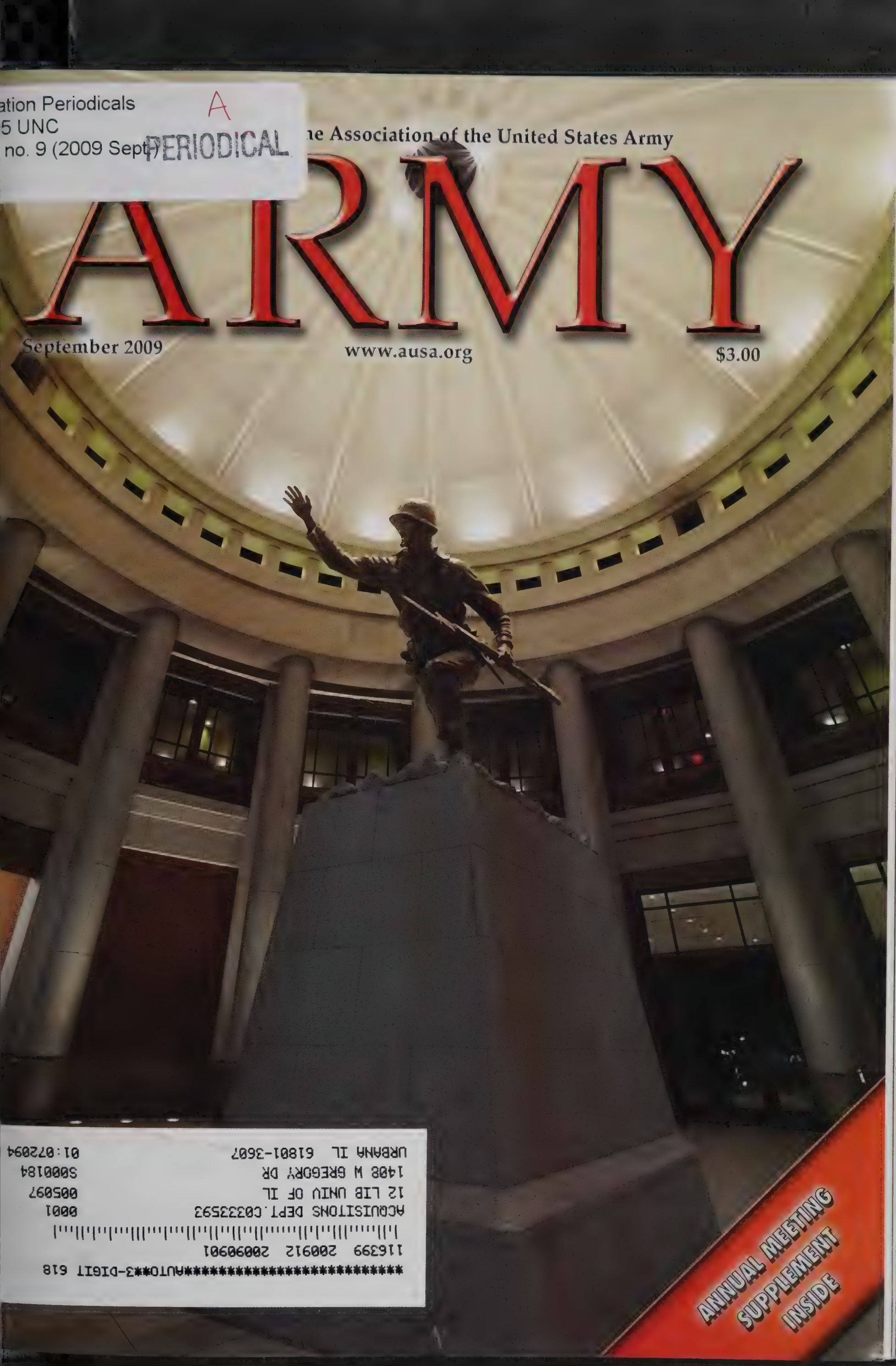

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FRONT & CENTER

The National Infantry Museum and Soldier Center *By GEN Frederick J. Kroesen, USA Ret.* ***Page 16***

Will We Hit the Target? *By LTG James M. Dubik, USA Ret.* ***Page 17***

More Evidence of a Self-Imposed Military Quandary *By Richard Hart Sinnreich* ***Page 20***

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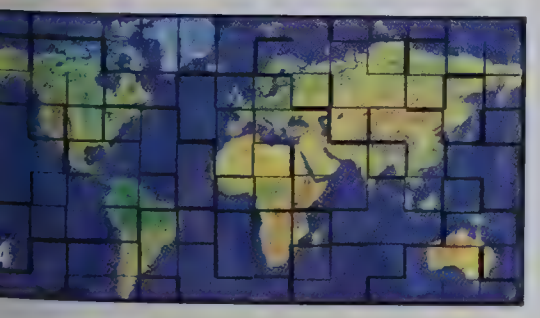














The National Infantry Museum and Soldier Center *Photographs by Dennis Steele*
The recently opened National Infantry Museum and Soldier Center, adjacent to Fort Benning, Ga., brings U.S. Army Infantry history to life with artifacts and exhibits from the Colonial era to the present. ***Page 28***

Back in the Fight—I Corps as Multi-National Corps-Iraq *By BG Peter C. Bayer Jr.*
As Headquarters Multi-National Corps-Iraq, I Corps, in the midst of its first deployment as a corps headquarters since the Korean War, has a singular mission: to merge six headquarters into one, U.S. Forces-Iraq. ***Page 34***

U.S. Army Africa: A Team Like No Other *By MG William B. Garrett III*
U.S. Army Africa's mission on the continent is unique: to promote sustained security among African land forces and serve as contingency headquarters supporting crisis response. ***Page 41***

Advisor Training Shifts to Fort Polk—Army Establishes Enduring Mission
By Dennis Steele
At Fort Polk, La., preparing advisors and training teams for Operations Iraqi Freedom and Enduring Freedom is now the mission of the 162nd Infantry Brigade, whose cadre of more than 800 soldiers reinforces today's skills in anticipation of tomorrow's challenges. ***Page 49***

Training at JRTC: The NCO Viewpoint *Photographs and interviews by Dennis Steele*
Five sergeants major—trainers and trainees alike—offer insights into brigade-level combat training in an environment that replicates what soldiers will likely face in Iraq and Afghanistan. ***Page 54***

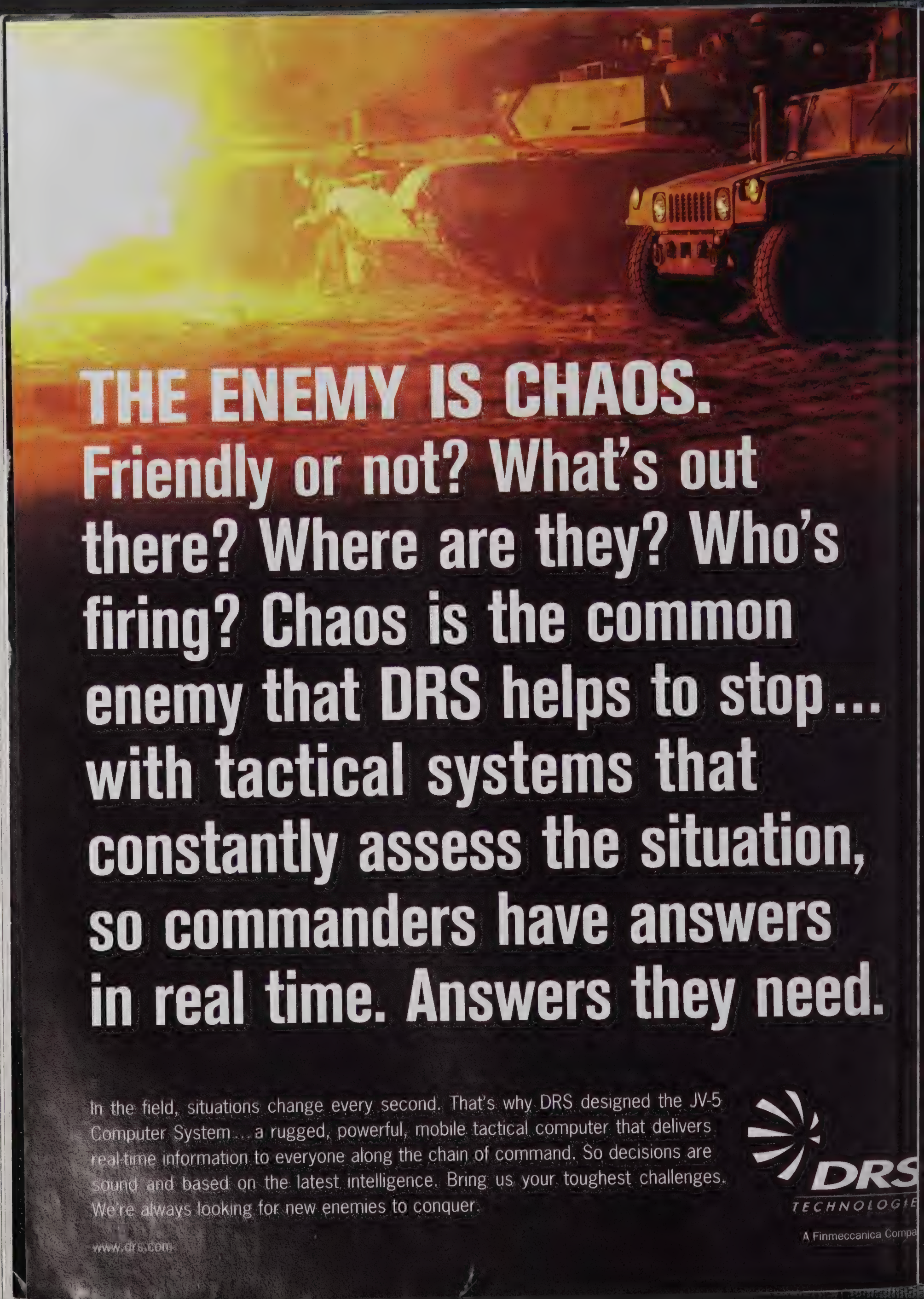
Persistent Conflict or Containment: Alternate Visions of Contemporary Conflict
By COL Gregory Fontenot, USA Ret., and COL Kevin Benson, USA Ret.
"If terrorism is one tool of al Qaeda and their fellow travelers, what might their other tools be, and is *persistent conflict* the only way to describe the problem?" ***Page 74***

Pentagon 9/11 Memorial *Photographs by Dennis Steele*
The Pentagon 9/11 Memorial, adjacent to the point where a hijacked airliner crashed into the building eight years ago, incorporates symbolic elements in a lasting tribute to the 184 victims of the terrorist attack. ***Page 82***

CompanyCommand—Building Combat-Ready Teams: Considerations on Releasing a Detainee
Company commanders share their experiences and offer personal advice on how to shape the conditions around a detainee's release into an area of operations. ***Page 86***

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Letters

'178 Streamers'

■ BG John S. Brown's June article, "178 Streamers" ("Historically Speaking"), was a wonderful and unique way of recognizing the U.S. Army's 234th birthday. BG Brown validates his history credentials by masterfully weaving fact and opinion into an instructive and thought-provoking piece. I was particularly moved by his last paragraph, in which he introduces the Lord's Prayer analogy. When I next view our noble standard, I will "think beyond the colorful embroidery to the millions of individual sacrifices and rich historical heritage [the streamers] represent." Thank you, BG Brown, for reminding me.

LTC T.J. GALLI, USA RET.
Rockwall, Texas



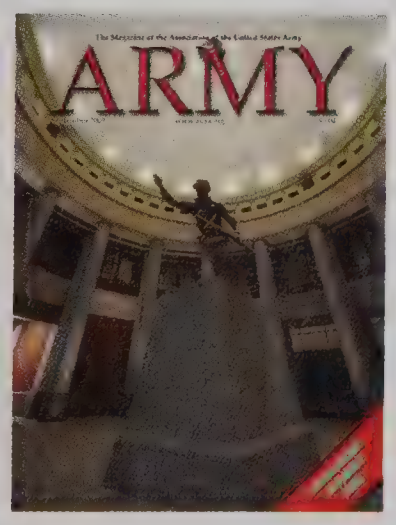
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Army Combat Uniforms

■ I enjoyed the articles about the 65th anniversary of D-Day in the August issue of ARMY Magazine. The articles were well written and the pictures interesting. What was not good was seeing so many U.S. soldiers attired in Army combat uniforms (ACUs) for a significant event that calls for more formal attire. I went to the 40th and 50th anniversaries of D-Day and was very impressed with the dress and decorum of the troops who supported those important events, both of which were attended by Presidents. All the troops who paraded and made ceremonial appearances then were dressed in freshly pressed "greens," shined shoes or boots, and colorful medals and ribbons. They looked great.

Now for the 65th anniversary, the pictures show a bunch of soldiers who look like "rag bags" in their ACUs. Even good-looking soldiers do not look good in a uniform that may be fine for combat but looks terrible for dress occasions. I don't know where we lost the bubble on making our soldiers look good in uniform. The ACUs are wrinkled (they cannot be pressed or starched) and make husky soldiers look fat and thin ones look like their uniforms do not fit. ACUs are a deplorable uniform for anything as important as D-Day. You can be sure that the other nations who sent soldiers to

This Month's Cover



The "Follow Me" statue—symbol of the Infantry spirit—occupies the entrance rotunda of the National Infantry Museum and Soldier Center's main museum building. Adjacent to Fort Benning, Ga., the recently opened museum houses exhibits that pay tribute to the American infantryman. This is the original "Follow Me" statue; a replica cast in 2004 is now located in front of Fort Benning's Infantry Hall. It was created in 1959 by two soldiers, PFC Manfred Bass, sculptor and designer, and PFC Karl H. Van Krog, who assisted. Articles on the museum begin on page 16 and page 28. Articles on other military museums will appear in forthcoming issues. *(Cover photograph by Dennis Steele)*

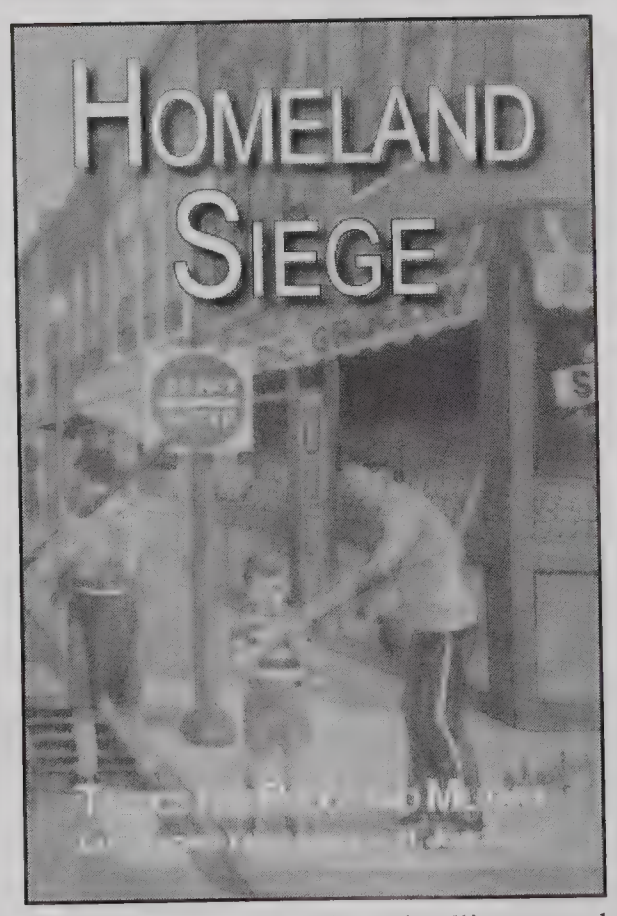


Courtesy 1st Infantry Division

CSM John Jones, 1st Brigade Combat Team, 1st Infantry Division, conducts a wreath-laying ceremony with D-Day veterans at the 1st Infantry Division memorial on Omaha Beach, France. Soldiers from the Big Red One traveled to Normandy to participate in D-Day ceremonies.

Normandy for the celebrations did not wear their "utility" uniforms to the commemorations. The U.S. Army needs to dress up more and learn how to look sharp once again. I was ashamed to see the soldiers looking so badly dressed because I know they can look better.

LTC THOMAS D. MORGAN, USA RET.
Steilacoom, Wash.



Homeland Siege is the latest intelligence and tactical-technique manual from *Last Hundred Yards* author H.J. Poole. After looking at who's behind American drug trade, ***Homeland Siege*** shows how to find U.S. and Afghan drug routes, assault buildings, and defend outposts without harming civilians. Send $14.95 plus $5.00 s&h to Posterity Press, P.O. Box 5360, Emerald Isle, NC, 28594; or pay by credit card at posteritypress.org and 800-505-4334.

Understanding PTSD

■ I was very interested in the comments made by Ray Kimball, Ryan Neely, Joe Geraci and Molly Kranc in response to a mother's request for help for her homecoming son (July "CompanyCommand"). Those who have experienced combat—for me, in Vietnam—understand that war changes you. It's recently been proven that there is a chemical change that occurs in the brain—it is not simply an alteration in personality or character as described by some of the respondents. The brain's neurons are affected by severe stress, causing the "fight or flight" reaction and the mesmerizing nightmares. In essence, as some doctors at the Department of Veterans Affairs have depicted it, it's like being continuously off balance. If you have had an ear infection for any length of time, you know how irritable that makes you.

Most Vietnam War veterans came home, ignored any signs of post-traumatic stress disorder (PTSD) and tried their best to live normal lives. September 11, 2001, changed that for many of us, who now are diagnosed with delayed PTSD. As described in my book, *The Ghost in the Orange Closet*, most veterans begin to change their perspective of PTSD once they accept that the chemical change is, for the most part, responsible for their shift in mood and temperament. Their road to recovery from—or management of—PTSD starts with that acknowledgment.

The frank and honest response from Molly Kranc is what is needed so tha soldiers can understand PTSD, realiz that it can be managed and openl seek other veterans to discuss wha has occurred. Vietnam veterans wer able to use the Internet 30 years late to talk about issues we should hav talked about as soon as we cam home. Repressed memories are muc more difficult to work through, and encourage all of our combat veterar to use the communication channe available to reach out and find peac Believe me, there is a positive resolu tion to living with PTSD.

TOM CRISER
Corpus Christi, Texas

Transforming Training

■ U.S. Army Training and Doctri Command (TRADOC) and the Cor bined Arms Center (CAC) have be aggressively transforming training d velopment to meet the operation Army's needs highlighted in retir LTG James M. Dubik's article, "Lear ing at the Speed of War" (April "Fro & Center").

Many points LTG Dubik makes his article are valid—the desire for t Army to train at the "speed of war" and should be, the focus of the gener ing force's support of our soldiers. acknowledge the gravity of our curr conflict and applaud TRADOC's sponsiveness in trying to turn reque for information on a dime. Over long haul, however, the generati force provides products for doctri full-spectrum operations training worldwide deployment possibilit not tactics, techniques and procedu which are not enduring as currently tablished by policy. Field Manual 1 *Army* establishes doctrine as "h Army forces contribute to campaig major operations, battles and enga ments ... a guide to action, not h and fast rules ... a common frame reference across the Army ... [t helps standardize operations, facili ing readiness by establishing comm ways of accomplishing military task

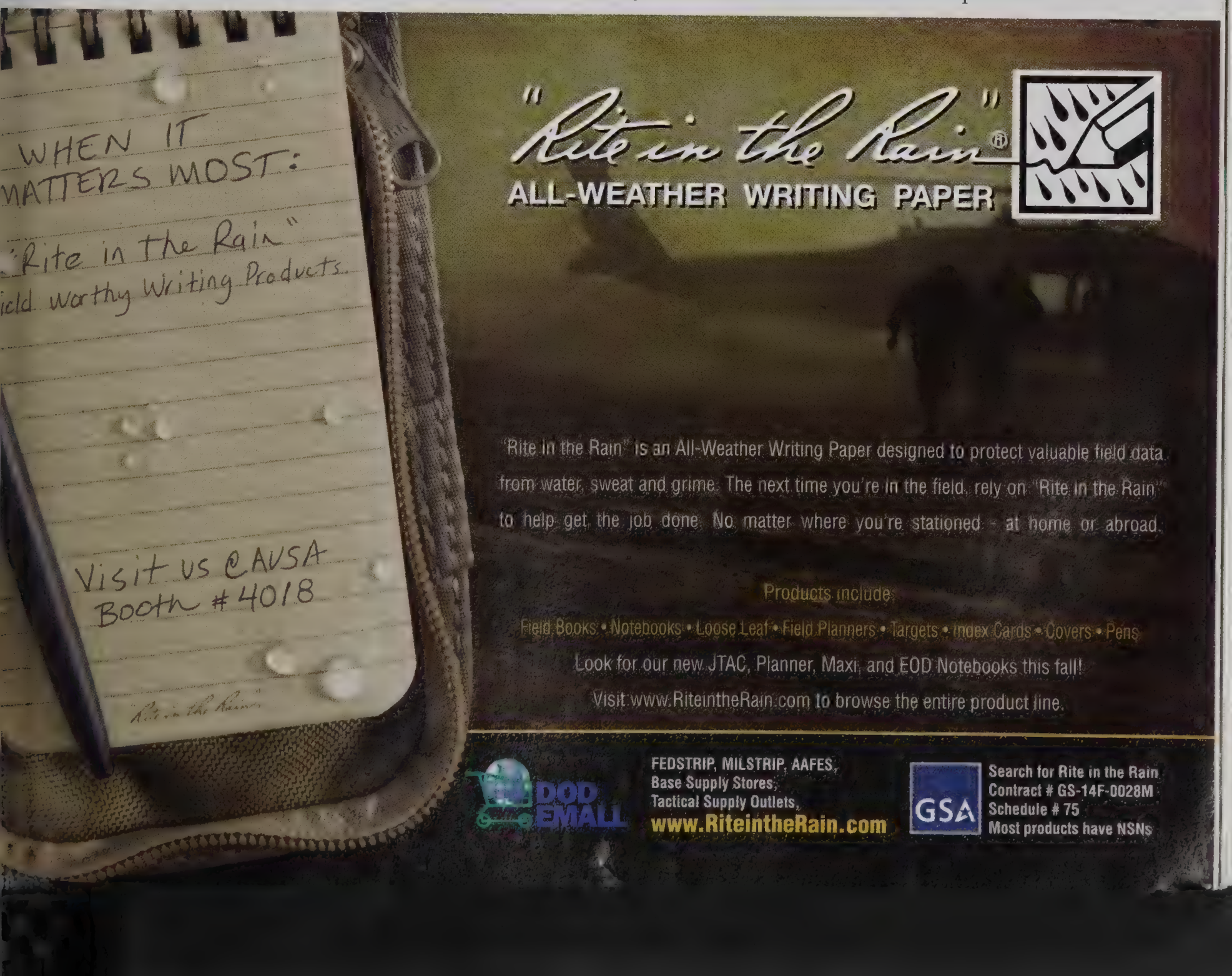
Much of what LTG Dubik descr is already here or on the cusp of lease. All Army Activities (ALARA 164/2005 was published to meet

bjective: "To ensure Army training re-
ains adaptive to an ever-changing
nvironment." The Army G-3 directed,
nd TRADOC moved forward on, a
ıomentous shift by doing away with
ıe paper-based mission training plans
MTPs) that were becoming irrelevant
ecause of our inability to keep them
pdated. Per a Department of the
rmy (DA) directive, they commenced
ork to enhance combined arms train-
ıg strategies (CATS). The ALARACT
irected that "a fundamental building
lock of the CATS is the conversion of
ıe Army Training and Evaluation Pro-
ram-MTP to a digital format." Dis-
laying initiative within intent, CAC
ggressively sought a better way to
rovide the most relevant and current
aining data and to provide a more
ıpid reaction and response to changes
r the field in the form of standards
ıat can have an immediate impact on
aining. Since the advent of the Head-
uarters, DA-approved core mission-
ssential task lists (CMETLs), unit
ommanders and their noncommis-
oned officers have been provided

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with a list of collective tasks from which to plan their training early in the Army force generation process to establish initial unit capabilities based on their tables of organization and equipment and their doctrine. CATS are now being based on CMETLs that offer Army leaders a manageable list of full spectrum tasks and are standardized Army-wide across 41 brigade-and-higher organizations. Current, relevant supporting tasks, conditions and standards are available through Army Knowledge Online and the Digital Training Management System (DTMS).

Our training management process is moving quantum leaps beyond bookshelves filled with three-ring binders of dated tasks in an MTP, but we still have a way to go. As the Army adapts to the Information Age and relational database technology, the DTMS has been designated by a January 2006 Army G-3 memo as the only authorized automated system for managing training in Army units. The Digital Training Management System provides the new CMETL-based CATS to the training community in a digital format. The CATS group collective tasks by function, providing suggested training events/exercises that can help a unit train to standard, and identifies the likely resources needed to tailor a training program that supports unit CMETLs based on the operational theme agreed to by commanders. Using our new CATS development in DTMS



allows the generating force's training developers to change individual tasks, performance steps and measures across the Army at the speed of the Web once the changes or new tasks are approved by the proponent. Changes, additions and deletions are automatically posted and visible to all trainers when they log onto DTMS. Changes automatically ripple through all of the training events utilizing those individual task modifications. Making training changes using DTMS not only allows "training at the speed of war," it also ensures that the training is current and relevant, allowing our Army to confront an enemy that has access to technology and information on the Internet.

LTG Dubik's point of adopting an online, collaborative process is currently a reality with the creation of the Army Training Network (ATN) this past April. ATN is a tool to help training doctrine keep pace with wartime learning. Because of the current operating tempo of fighting war, returning from war or getting ready to go to war, one of our shortfalls is educating the force about all of our accomplishments on their behalf. The lack of dwell time has solidified our resolve to push the importance of online collaboration and input. Due to short dwell times at home stations, validating the CATS and supporting tasks with operational units is an issue that is in the process of being resolved with U.S. Forces Command. We want to move at Information Age speed in getting "muddy- and dusty-boot units" to review the proposed tasks based on doctrine. We also want them to validate whether or not, in their opinion, the suggested CATS and tasks are full spectrum and applicable to their training for worldwide deployment and with tailoring can be adjusted for specific operations while deployed to U.S. Central Command (or our "next big thing").

COL KENT ERVIN, USA RET.
Collective Training Directorate
Combined Arms Center-Training
Fort Leavenworth, Kan.

The Army Motto

■ For the past 12 years, I have made San Diego, Calif., home. It's a great city with a large number of military retirees in residence. San Diego is also home to several active U.S. Marine Corps and U.S. Navy bases. Since I live in close proximity to two large Marine bases, I come into repeated contact with both active and retired members of the Marine Corps, and, I have to admit, we of the Army persuasion could learn a thing or two from them. For example, the phrase "Semper Fi" is ubiquitous. It's seen on license-plate holders, bump-er stickers, rear-window decals and biceps. The entire nation, as well as more than a few foreigners, recognize that *Semper Fidelis* is what the shorter version refers to and that it is the motto of the Marine Corps.

Meanwhile, the Army tries to make something of a series of phrases that are somewhat vague and less than an cient or permanent. "This We'll Defend" is respectable but vague and no exactly encountered on many biceps "Army Strong" is the latest of a serie that included the less-than-inspiring "Army of One" and "Be All You Can Be." So, I'd like to make a suggestion.

We have been an all-volunteer force for more than 30 years, and it is highl doubtful that we will ever see the mi itary draft again. How about a two word motto that carries the impac and meaning of volunteering for special task of great importance to th people from whom the volunteer chosen? How about "Send Me"? Yes, did get the idea from the Bible, speci ically Isaiah 6:8: "'Whom shall I send And who will go for us?' And I sai 'Here am I. Send me!'" Of course, th origin of my inspiration may offer some, but I have no problem with n emphasizing that point. In any cas I throw this out for discussion. W need something more meaningful, r flective and permanent than "Arm Strong."

COL DAVID G. EPSTEIN, AUS RET.
San Diego, Calif.

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Washington Report

Gates Calls for Temporary Army End Strength Increase

Defense Secretary Robert M. Gates announced at a Pentagon press conference in late July that the size of the Army will be increased by up to 22,000 soldiers for a period of three fiscal years, raising the size of the Army to 569,000 active duty soldiers. The additional troops are needed to meet the requirements of the wars in Iraq and Afghanistan as well as other missions worldwide. Secretary Gates first increased the size of the Army in 2007, shortly after taking office.

"This is a temporary challenge, which will peak in the coming year and abate over the course of the next three years," Secretary Gates said. "This decision will result in additional tough choices for the department. … However, I'm convinced that this is an important and necessary step to ensure that we continue to properly support the needs of our commanders in the field, while providing relief for our current force and their families."

The current end strength, including the 65,000 soldiers Congress previously approved as a permanent increase, i 547,000. Although progress in Iraq will lead to reduction i troop numbers there, Gates told reporters that increase violence in Afghanistan calls for the additional troops i that country. The persistent pace of operations has led t an increase in numbers of troops who are unavailable fo deployment with their units. In addition, the decision t end stop-loss is contributing to the shortage. Currentl some 30,000 soldiers cannot deploy—about 9,400 are i warrior transition units, another 10,000 are otherwise me ically undeployable, and the other 10,000 have been r cently redeployed or have been chosen for other dutie The temporary end-strength increase will allow the Arm to deploy all units at about 95 percent strength.

Secretary Gates said that the cost of the personnel i crease will be absorbed in funding already allocated for fi cal years 2009 and 2010; he said he will work with t Obama administration on funding for 2011 and 2012.

President Salutes Veterans. On July 27, the 56th anniversary of the Korean War armistice, President Barack Obama signed H.R. 2632, the Korean War Veterans Recognition Act. The act adds July 27 to the list of days on which the display of the U.S. flag is especially encouraged. The bill passed the House of Representatives by a vote of 421-0 and the Senate by unanimous consent.

"Today," the President said, "we owe special remembrance to the veterans of the Korean War, and especially the U.S. and allied combatants who made the ultimate sacrifice in Korea



U.S. Army

President Obama and Secretary of Veterans Affairs GEN Eric K. Shinseki, USA Ret., discuss Post-9/11 GI Bill benefits at a White House press briefing in August.

In addition, on August 3, to mark the implementation the Post-9/11 GI Bill, President Obama, Vice President J Biden, Secretary of Veterans Affairs GEN Eric Shinseki, U Army retired, and Virginia Sen. Jim Webb, who introduc the bill in Congress, joined hundreds of young veterans a celebration at George Mason University in Fairfax, Va.

"Those who served over the last eight years," said t President, "are the authors of one of the most extraordina chapters of military service in the history of our nation." T bill, he continued, "is not simply a debt that we are repayi … it is an investment in our own country."

SMA Calls for TRICARE Review. SMA Kenneth O. Prest testifying before the House Armed Services Military Pers nel Subcommittee in late July, recommended reviewing standards of the military health-care program TRICA SMA Preston and top NCOs from other services spoke the problems of military family support programs.

"One of the major accessibility challenges to getting q ity medical care is finding sufficient health-care provid outside of our military installations who accept TRICA payment," SMA Preston told the subcommittee. "Many them were left with a bad taste in their mouth from deal with TRICARE before because of the length of time it t to get reimbursement." The health-care program was vamped because of those reimbursement problems, SMA Preston said the program still has gaps.

The Department of Defense, at about the same time, nounced the selection of new TRICARE managed care s



SMA Kenneth Preston addresses members of Congress earlier this year; in July, he returned to Capitol Hill to recommend reviewing TRICARE standards.

ort contractors. Transition from the current contracts is nder way, and health-care delivery under the new contracts should begin on April 1, 2010. The TRICARE West egion retains its current contractor, TriWest Healthcare Alance Corporation. Aetna Government Health Plans of artford, Conn., has been selected for the North region, relacing Health Net Federal Services. UnitedHealth Military & Veterans Services, based in Minnesota, will replace umana Military Healthcare Services in the South region. ll the TRICARE benefit options offered under the current ontracts will remain the same.

Once a Soldier. The Association of the United States Army's newest edition of *Once a Soldier ... Always a Soldier* is now available. All legislators in Congress who have served or are currently serving in the Army are listed in alphabetical order, senators followed by representatives, with photographs.

The book also contains listings of the oversight committees, the members of the House Army Caucus, the Reserve Components Caucus, the Senate National Guard Caucus, the Senate Reserve Caucus and the Senate Army Caucus. It includes information about how to communicate with Congress, including addresses, telephone numbers and web addresses.

Six new members of the House of Representatives appear in the book. They are:

- Mike Coffman, 6th District, Colo. (R)
- Parker Griffith, M.D., 5th District, Ala. (D)
- Brett Guthrie, 2nd District, Ky. (R)
- Walt Minnick, 1st District, Idaho (D)
- Phil Roe, 1st District, Tenn. (R)
- Thomas J. Rooney, 16th District, Fla. (R)

Once a Soldier can be downloaded from the AUSA web site. Visit www.ausa.org/legislation/congressionalinfo.

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News Call

GEN McChrystal to Address 'Additional Issues'

Secretary of Defense Robert M. Gates has tasked GEN Stanley A. McChrystal, commander of NATO and U.S. forces in Afghanistan, with addressing "some additional issues" in his assessment of the situation on the ground in Afghanistan, and allotted him more time for his appraisal.

In August, Secretary Gates, chairman of the Joint Chiefs of Staff Adm. Mike Mullen and several other top U.S. defense officials met with GEN McChrystal and LTG David M. Rodriguez, his deputy commander, in Belgium to receive an early update. The meeting was unannounced, and no representatives of the press were present.

When GEN McChrystal took command in Afghanistan in June, Secretary Gates gave him 60 days to review the situation there and determine if all forces were being used to their best advantage. At the time ARMY went to press, the assessment was to have been delayed until after the August 20 Afghan presidential and provincial elections.

Despite some early—and anonymous—reports that GEN McChrystal will call for more troops, DoD announced that the assessment will not include specific resource recommendations or requests, and that if some are required after it is reviewed, those requests will be made through the normal chain-of-command process. DoD also reiterated Secretary Gates' earlier recognition that to retain public and congressional support for the operations, some progress must occur in Afghanistan within the next 12 to 18 months.

In an August interview with the *Wall Street Journal* in Kabul, GEN McChrystal said the insurgency in Afghanistan has initiative and momentum that must be reversed. To that end, he said he will redeploy some troops from sparsely settled areas to heavily populated areas, such as the southern city of Kandahar, to protect people from rising levels of Taliban violence and intimidation. This will call for numerous troops, and GEN McChrystal noted that the Afghan army and national police must expand significantly.

MG Curtis Scaparrotti, commander of Combined Joint Task Force-82, Regional Command East, also sees a need for greater capacity within the Afghan national security forces. "We look at not only building their competence but building their capacity at a quicker pace than what's laid out now," he said in a DoD news briefing last month. His most difficult challenge, he noted, is the increasing sophistication of improvised explosive devices, the cause of 70 percent of U.S. casualties.

Another new aspect of operations in Afghanistan is that NATO's governing body has approved the reorganization of the command structure there and established a new Intermediate Joint Headquarters to manage the day-to-day running of the war. LTG David Rodriguez will lead that new command reporting to GEN McChrystal.

Progress in Iraq. In August, the Department of Defense reported "incredible progress" in Iraq. The battle deaths during the month of July were the lowest number in the history of the conflict, and there were fewer security incidents on record overall. In late July Secretary of Defense Robert M. Gates said that a combat brigade of 5,000 troops might be redeployed early if the trend of reduced violence holds. There are still concerns, however, particularly that Arab-Kurd tensions could spark violence in the north, and the Pentagon has emphasized that a drawdown plan will be predicated on conditions on the ground in Iraq and will not be influenced by the war in Afghanistan.

Senior commanders have also voiced their approval and satisfaction with the progress made in Iraq since U.S. combat troops withdrew from the cities. BG Stephen Lanza, spokesman for Multi-National Force-Iraq, said in a July 2 interview that "there is significant i-

Upcoming Deployments

Operation Enduring Freedom

- The 3rd Brigade Combat Team (BCT), 101st Airborne Division, Fort Campbell, Ky., will deploy with approximately 3,800 troops this fall.
- The 173rd Airborne Brigade, Vicenza, Italy, with approximately 3,700 troops, will deploy in the winter of 2009–10.

Neither unit is part of the build-up currently under way in Afghanistan.

Operation Iraqi Freedom

- Headquarters Units:
  3rd Infantry Division Headquarters, Fort Stewart, Ga.
  1st Infantry Division Headquarters, Fort Riley, Kan.
  1st Armored Division Headquarters, Wiesbaden, Germany
- Brigade Combat Teams:
  1st BCT, 1st Armored Division, Fort Bliss, Texas
  1st BCT, 10th Mountain Division, Fort Drum, N.Y.
  2nd BCT, 10th Mountain Division, Fort Drum, N.Y.
- Advisory and Assistance Brigades:
  3rd BCT, 3rd Infantry Division, Fort Benning, Ga.
  2nd BCT, 3rd Infantry Division, Fort Stewart, Ga.
  1st BCT, 3rd Infantry Division, Fort Stewart, Ga.
  3rd BCT, 4th Infantry Division, Fort Carson, Colo.
- Security Force Brigade:
  53rd BCT, Florida Army National Guard

ovement" and "the actions are obvi-
s on the ground."
MG Daniel Bolger, commander of the
t Cavalry Division, Fort Hood, Texas,
d commanding general of Multi-Na-
nal Division-Baghdad, leads 31,000
ldiers protecting some 6 million peo-
e in the city of Baghdad and another
llion in the countryside around the
y. In a July DoD news briefing, MG
lger said that "there were some hic-
ps" with the Iraqis when the status
forces agreement first took effect,
t "despite those initial frustrations
it seems to be going pretty well."
There are fewer U.S. forces in the city,
G Bolger said, and they are already in
e role of advising and assisting. He
inted out that future forces arriving
Iraq are "designated as advisory and
sist brigades [that will] have addi-
nal officers and NCOs specifically fo-
sed on the partnership role."
Three members of the 34th Infantry
vision—the Red Bulls—were killed
a rocket attack in late July. MG
chard Nash, commander of Multi-
tional Division-South, headquar-



U.S. Army

SFC Jared C. Monti

tered in Basra, said that within a day or two, Iraqi security forces had captured three people who were involved in the indirect-fire incident. He noted, though, a change in the enemy's tactics: Insurgents are using indirect fire against bases where soldiers are now concentrated. MG Nash said he has taken additional force-protection measures to forestall that threat. The potential for violence still exists in Iraq; according to MG Nash, upcoming security challenges that will test Iraqi forces include the celebration of Ramadan, the Islamic holy month that began in late August; national elections in early 2010; and the seating of the new government.

Medal of Honor. President Barack Obama will posthumously award Jared C. Monti, a staff sergeant who was killed in Afghanistan in June 2006 while deployed with the 10th Mountain Division, the Medal of Honor on September 17 in a White House ceremony; his parents and family members will attend.

SFC Monti, who was assigned to 3rd Squadron, 71st Cavalry, 3rd Brigade Combat Team, 10th Mountain Division, was killed in Gowardesh,

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Nuristan Province, Afghanistan, when enemy forces ambushed his unit using small-arms fire and rocket-propelled grenades. Posthumously promoted to sergeant first class, Monti will become the sixth servicemember to receive the Medal of Honor during operations in Iraq and Afghanistan. He is the first soldier to receive the nation's highest award for valor in Afghanistan, and the occasion will mark the first time President Obama has conferred the military decoration.

First Female Commandant. In August, CSM Teresa King was named commandant of the U.S. Army Drill Sergeant School, the first woman selected by the Army to lead the school. She succeeds CSM Gary Newsome at Fort Jackson, S.C.

"I went to drill sergeant school before I went to my basic school for my MOS [military occupational specialty]," CSM King said in a DoD news release. "The U.S. Army Drill Sergeant School has set the foundation for my training, so it's ironic that I'm going home."

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from July 1 to July 31, 2009. All names have been released through the Department of Defense; families have been notified.

PFC Justin A. Casillas, 19
SGT Brock H. Chavers, 25
SPC Justin D. Coleman, 21
SFC Jason J. Fabrizi, 29
PFC Aaron E. Fairbairn, 20
SPC Joshua R. Farris, 22
CPT Mark A. Garner, 30
PFC Nicolas H.J. Gideon, 20
SPC Chester W. Hosford, 35
SPC Issac L. Johnson, 24
CPL Benjamin S. Kopp, 21
SPC Anthony M. Lightfoot, 20
SSG Eric J. Lindstrom, 27
SPC Gregory J. Missman, 36
SPC Raymundo P. Morales, 34
SPC Randy L.J. Neff Jr., 22
SGT Gregory Owens Jr., 24
PFC Dennis J. Pratt, 34
SGT Joshua J. Rimer, 24
SPC Andrew J. Roughton, 21
PVT Gerrick D. Smith, 19
SPC Christopher M. Talbert, 24
CWO Douglas M. Vose III, 38
2LT Derwin I. Williams, 41

With 29 years of Army service, CSM King underwent basic combat training and advanced individual training at Fort Jackson and later attended drill sergeant school at Fort Dix, N.J. She has served in a variety of positions, including the top enlisted advisor to NATO's military commander in Europe. Most recently, CSM King served as the 369 Adjutant General Battalion's comma sergeant major. CSM King is a grad ate of the Sergeants Major Acade and all other subsequent Nonco missioned Officer Education Syst courses, including Airborne, Air A sault and the Master Fitness Course



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Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from July 1 to July 31, 2009. All names have been released through the Department of Defense; families have been notified.

SGT Roger L. Adams Jr., 36
SGT Juan C. Baldeosingh, 30
SPC Herberth A. Berrios-Campos, 21
SPC Robert L. Bittiker, 39
PVT Lucas M. Bregg, 19
SPC Daniel P. Drevnick, 22
CWO Rodney A. Jarvis, 34
SFC Edward C. Kramer, 39
SPC James D. Wertish, 20
SPC Carlos E. Wilcox IV, 27

Last year the Army consolidated its ree schools for drill instructors at e service's largest training installa- on, Fort Jackson. Selection to the hool is one of the highest honors the rmy can bestow on a noncommis- oned officer; only the most qualified ndidates are chosen to attend. The hool graduates approximately 120 ill sergeants annually.

terprise Aviation Expo. The city of terprise, Ala., a neighboring city of e U.S. Army Aviation Center of Ex- llence and Fort Rucker, will hold an iation expo at the Enterprise Munici- l Airport on September 26. The event ll pay tribute to aviation heritage by



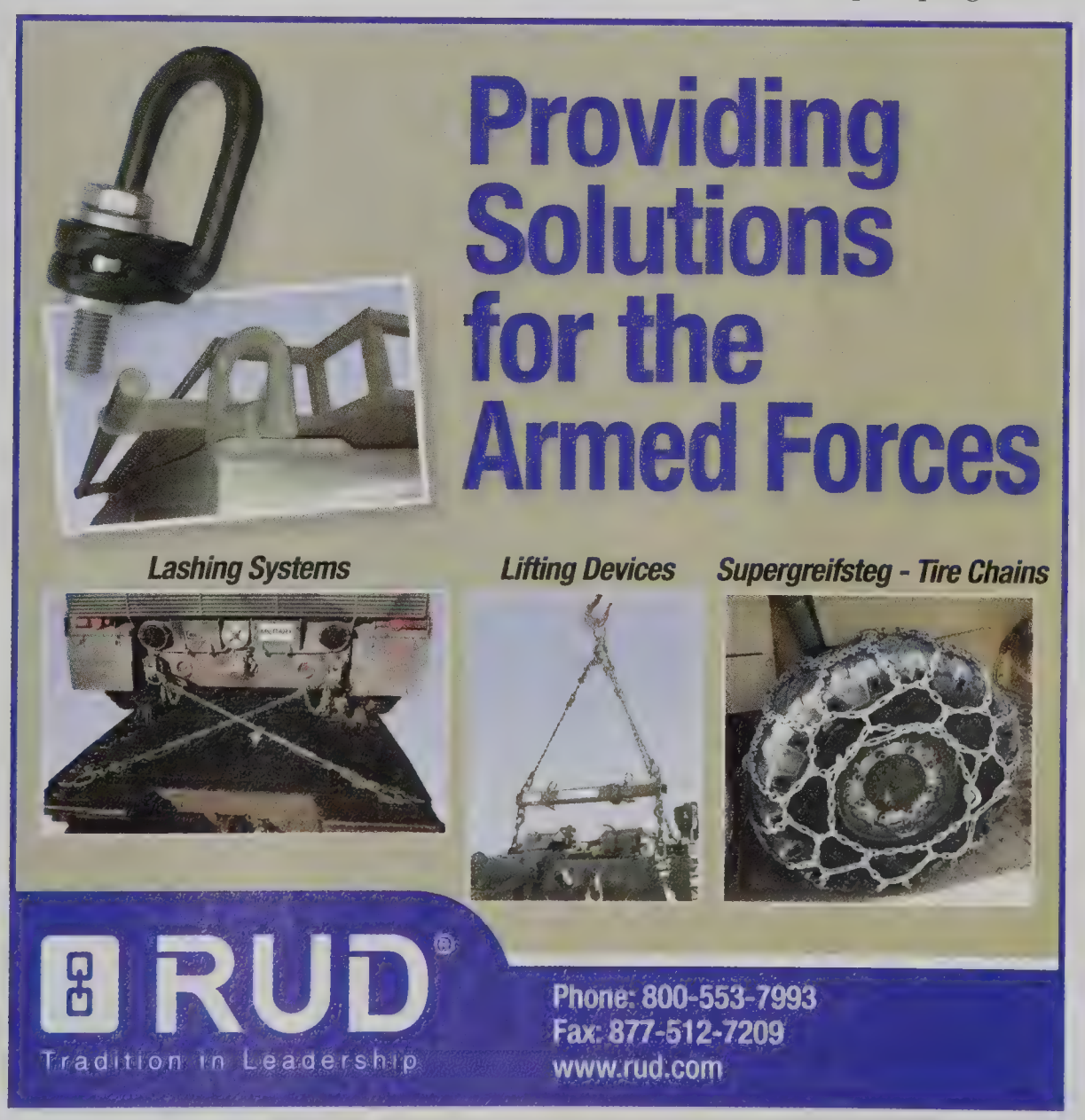
NASA

COL Tim Kopra, in the space shuttle Endeavour*'s cargo bay, prepares for the first of five planned spacewalks.*

highlighting many warbirds and other vintage aircraft from throughout U.S. military history. For more information, contact co-coordinator Rachel Davis at (334) 348-2604 or e-mail rdavis@cityofenterprise.net.

Army in Space. Army astronaut COL Tim Kopra launched July 15 with six other crewmembers aboard the shuttle *Endeavor* to make modifications to the International Space Station. Mission specialist Kopra, 46, performed a more-than-five-hour spacewalk while preparing the berthing mechanisms of a new laboratory and platform for conducting experiments. When the 16-day shuttle mission was complete, COL Kopra stayed on board the space station; he will spend several weeks as its flight engineer.

COL Kopra is a West Point graduate and Bronze Star recipient. He served with the 101st Airborne Division (Air Assault) and 3rd Armored Division and was an experimental test pilot and developmental test director for the Comanche helicopter program at



COMMAND SERGEANT MAJOR CHANGE*



CSM M.M. Balch from SOUTHCOM, Miami, Fla., to SHAPE, Mons, Belgium.

■ ***SHAPE***—*Supreme Headquarters Allied Powers Europe;* ***SOUTHCOM***—*U.S. Army Southern Command.*

*Command sergeant major position assigned to a general officer command.

GENERAL OFFICER CHANGES*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*



LTG L.J. Austin III from CG, XVIII Abn. Corps and Fort Bragg, Fort Bragg, N.C., to Dir., Jt. Staff, Washington, D.C.



LTG D.K. Chipman from Cmdr./Cmdt., TJAGLCS, Charlottesville, Va., to TJAG, Washington, D.C.



LTG K.W. Hunzeker from CG, V Corps, USAREUR and Seventh Army, Germany, to Dep. Cmdr., MNF-I.



LTG P.K. Keen from CoS, EUCOM, Germany, to Dep. Cmdr., SOUTHCOM, Miami, Fla.



LTG R.P. Lennox from Dir., Quadrennial Defense Review, ODCS, G-8, Washington, D.C., to DCS, G-8.



LTG J.E. Sterling Jr. from Asst. CoS, C-3/J-3, UNC/CFC/USFK to Dep. CG/CoS, TRADOC, Fort Monroe, Va.



MG C.A. Anderson from Dep. CG, Third Army/USARCENT to CG, First Army Div. West and Fort Carson, Fort Carson, Colo.



MG C.J. Tate II from Cmdr., USALSA/Chief Judge, ACCA, Arlington, Va., to Dep. JAG, Arlington, Va.



MG W.J. Troy from Vice Dir. for Force Structure, Resources and Assessment, J-8, Jt. Staff, Washington, D.C., to CG, USARAK/Dep. Cmdr., ALCOM, Fort Richardson, Alaska.

Brigadier Generals: **M.G. Compton**, USAR, from Asst. CoS, G-5, Eighth U.S. Army, Yongsan, Korea, to Dep. Dir., CJ-5, MNF-I, OIF, Iraq; **K.P. Cox** from CG, U.S.A. Engineer Div., Southwestern, Dallas, Texas, to CG, Gulf Region Division, MNC-I, OIF; **R.S. Ferrell** from Dir., Army Modernization, Strategic Communication, ARCIC-Forward, TRADOC, Arlington, Va., to Dir. for C4 Systems, AFRICOM, Germany; **W.F. Grimsley** from Dep. CG, III Corps and Fort Hood, Texas, to Asst. CoS, C-3/J-3, UNC/CFC/USFK/Dep. CG, Eighth U.S. Army, Korea; **D.L. Harris**, ARNG, from Dep. Cmdr., JFHQ, Indiana ARNG, Indianapolis, Ind., to CoS, KFOR, Pristina, Kosovo; **M.T. Harrison Sr.** from Dir., Joint and Futures, ODCS, G-8, Washington, D.C., to Vice Dir. for Force Structure, Resources and Assessment, J-8, Jt. Staff, Washington, D.C.; **J.C. Horne** from Dep. Dir., JFCC-SPACE, STRATCOM, Chantilly, Va., to Dir., Human Resources Policy Directorate, ODCS, G-1, Washington, D.C.; **F.G. Mahon** from Dir., Quadrennial Defense Review, ODCS, G-8, Washington, D.C., to Dep., Test and Assessment, MDA, Washington, D.C.; **J.C. McConville** from Dep. CG (Spt.), 101st Airborne. Div. (AA), Fort Campbell, Ky., to Dep. Chief, Legislative Liaison, OSA, Washington, D.C.; **J.R. McMahon** from Dir., J-7, Engineering, USF-A, OEF, Afghanistan, to CG, U.S.A. Engineer Div., Southwestern, Dallas; **J.W. Nicholson Jr.** from Dep. Cmdr.-Stability, RC(S), ISAF, NATO, OEF to Dir., Pakistan/Afghanistan Coordination Cell, Jt. Staff, Washington, D.C.; **G.F. Perna** from Cmdr., DSCP, DLA, Philadelphia, Pa., to Dir., CJ-1/4/8, Sustainment, MNF-I, OIF, Iraq; **M.A. Ryan** from Dir. of Strategic Effects, USF-A, OEF, Afghanistan, to Dep. CG, V Corps, USAREUR and Seventh Army, Germany; **R.A. Thomas III** from Dep. CG, JSOC, Fort Bragg, to Dep. Dir. for Special Ops., J-37, Jt. Staff, Washington, D.C.; **K.R. Wendel** from Dir. of Operational Maneuver, Third Army/USARCENT to Dep. Dir., Ops., AFRICOM; **J.F. Wharton** from Dep. CG, AFSC, with duty as CG, AMC-Southwest Asia/G-4, U.S. Army Central to CoS, AMC, Fort Belvoir, Va.

■ ***AACCA**—U.S. Army Court of Criminal Appeals; **AFRICOM**—U.S. Africa Command; **AFSC**—U.S. Army Field Support Command; **ALCOM**—U.S. Alaskan Command; **AMC**—Army Materiel Command; **ARCIC**—Army Capabilities Integration Center; **ARNG**—Army National Guard; **CFC**—Combined Forces Command; **DLA**—Defense Logistics Agency; **DSCP**—Defense Supply Center Philadelphia; **EUCOM**—U.S. European Command; **ISAF**—International Security Assistance Force; **JFCC-SPACE**—Joint Functional Component Command for Space; **JFHQ**—Joint Forces Headquarters; **JSOC**—Joint Special Operations Command; **KFOR**—Kosovo Force; **MDA**—Missile Defense Agency; **MNC-I**—Multi-National Corps-Iraq; **MNF-I**—Multi-National Force-Iraq; **NATO**—North Atlanic Treaty Organzation; **ODCS**—Office of the Deputy Chief of Staff; **OEF**—Operation Enduring Freedom; **OIF**—Operation Iraqi Freedom; **OSA**—Office of the Secretary of the Army; **RC(S)**—Regional Command South; **SOUTHCOM**—U.S. Southern Command; **STRATCOM**—U.S. Strategic Command; **TJAG**—The Judge Advocate General; **TJAGLCS**—The Judge Advocate General's Legal Center and School; **TRADOC**—U.S. Army Training and Doctrine Command; **UNC**—U.N. Command; **USALSA**—U.S. Army Legal Services Agency; **USAR**—U.S. Army Reserve; **USARAK**—U.S. Army Alaska; **USARCENT**—U.S. Army Central; **USAREUR**—U.S. Army Europe; **USF-A**—U.S. Forces-Afghanistan; **USFK**—U.S. Forces Korea.*

the U.S. Army Aviation Technical Test Center, Fort Rucker, Ala. He is one of four active Army astronauts in the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command detachment.

Force Structure Actions. The Department of the Army recently announced force structure actions at Fort Bliss, Texas, and Fort Carson, Colo. The 3rd Infantry Brigade Combat Team (IBCT), 1st Armored Division, will activate at Fort Bliss. The 3rd IBCT is brigade combat team number 44 of the Grow the Army initiative. The stationing action, which was scheduled for completion by August 16, represents an increase of 3,444 military authorizations and no change in civilian authorizations at Fort Bliss.

Several force structure actions at Fort Carson will be completed by April 16, 2010. They are: the planned activations of the 46th Engineer Detachme 615th Engineer Company and the 52 Engineer Battalion Headquarters; activation of the 80th Engineer Te and 40th Quartermaster Team; and realignment of the 230th Finance Co pany, 576th Engineer Company a the 59th Quartermaster Company. combined actions represent an incre of 432 military authorizations and change in Army civilian authorizati at Fort Carson.



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The National Infantry Museum and Soldier Center

By GEN Frederick J. Kroesen
U.S. Army retired

The story of American infantrymen begins in 1607, when the Jamestown settlers sought to protect themselves from the forays of native tribes, then thought to be Indians. The story continues from then to now, as the Infantry has fulfilled its critical role in every war fought in or by our nation. The Infantry story can never be told completely, but the new National Infantry Museum and Soldier Center at Patriot Park at the entrance to Fort Benning, Ga., is a magnificent effort that highlights, calls to memory and excites interest in the exploits, impact and successes of infantry forces throughout American history.

The museum was founded 402 years after 1607 and 234 years after the Continental Congress authorized the activation of 10 infantry companies, which heralded the birth of what is now the U.S. Army on June 14, 1775. It is a $100 million world-class facility, almost worth the wait. It is disappointing only in being too late for millions of those who are honored by its existence. They cannot walk among the realistic scenes of the past, touch the hardware they employed, or recall and recount the stories behind the displays, but we can believe that they are aware, approving and satisfied that today's generation is grateful for the legacy they helped create.

The main museum divides history into six "Era Galleries": Securing Our Freedoms (1607–1815), Manifest Destiny and the Civil War (1815–1898), Entering the International Stage (1898–1920), A World Power (1920–1947), The Cold War (1947–1989) and The Sole Superpower (1989–Present). There are a Hall of Valor for Medal of Honor recipients and Halls of Honor for the Rangers and Officer Candidate School graduates. In the "Last 100 Yards" exhibit, first to the rat-a-tat drummer's call, visitors proceed along an inclined through "living museum" experiences. Tour guides lead one from Yorktown to the Civil War, Indian Wars, World War I and World War II scenes, the Korean War, the Vietnam War and Operation Desert Storm. You pass through historical events with sights, sounds—even smells—of infantry combat. You will suffer in a World War I trench, parachute onto Corregidor in the Philippines and air-assault into Landing Zone X-ray in Vietnam.

Then there is the Infantry Theater, where an untitled video, referred to a



Dennis Steele

e closing experience, dramatizes the motional and visceral experiences of fantrymen's lives as described by e voices of some who were there or hers whose diaries, interviews or her accounts are reported.

Finally, outside one strolls along eritage Walk—on custom-engraved avers dedicated to individual infanymen (donation required)—past our ate and territorial flags to the "Comny Street," a preserved collection a barracks, orderly room, supply om and mess hall of World War II ntage. The street and a chapel are plicas of the facilities that accommoted the 8-million-man Army cred seemingly overnight by burgeong U.S. industrial might.

Back in the main building, the Fife d Drum bistro, touted as the best ace for lunch and/or dinner, might mpt one to spend the whole day. The ree-dimensional IMAX theater may the place to stash the children while u wander the premises. (A Harry tter film was playing when I vis-d.) The Soldier Store offers a vast section of mementos—flags, patches, signia, clothing and so on.

The novice infantryman, the seasoned Army family and the everytourist alike are impressed, touched d ready to express gratitude for the gns of patriotism and sacrifices voked by the history depicted. So their support of the National Intry Foundation—along with donans from the American military-dustrial complex and friendly, apeciative foreigners (especially the reans)—have built and sustained institution. Continuing help of that ture will be needed to ensure that ure generations of infantrymen are presented in the ever-expanding play requirements. For more infortion, visit www.nationalinfantryuseum.com. □

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*N **Frederick J. Kroesen**, USA Ret., is former commander in chief of U.S. Army Europe and a senior fellow of AUSA's Institute of Land Warfare. **Gretchen Tackaberry** contributed to his account.*

Will We Hit the Target?

By LTG James M. Dubik
U.S. Army retired

The upcoming Quadrennial Defense Review is resurrecting a debate over Army force structure. Two camps are already visible; neither, however, is a proper guide.

The first camp is forming around conventional combat forces. This camp claims that Army combat, combat support and combat service support units should be organized, trained and equipped to fight conventional combat. Such forces, this camp argues, have the capability to fight a "high-end" enemy in conventional combat and, with some adjustments to training and equipment, any other lesser enemy. This camp has history on its side—this approach served us well during the Cold War.



A second camp argues that there is no high-end conventional combat on our horizon. What conventional threat there is, they believe, can be defeated primarily by U.S. air and missile forces. Furthermore, this camp holds that if a significant conventional threat emerges, America will have the time to retool its forces; therefore, the Army should organize its forces around "middle-weight" units like Stryker brigade combat teams augmented with the right mix of combat support and combat service support organizations needed to fight wars like those in Afghanistan and Iraq.

Both camps rely on false assumptions. The conventional camp assumes that what worked in the past will work in the future; the niche camp assumes it can predict the future. Neither reflects the essence of our current and projected strategic environment: uncertainty, ambiguity and unpredictability. Neither a model that worked in the Cold War, when relative certainty and predictability was the norm, nor a model that bets on one of the many possible futures, fits the kind of strate gic environment we face today or i the foreseeable future.

The simple model of deducing forc design from known or predicate threats no longer works. The threat and the conditions that give rise t crises are too varied; the world, to complex; the shelf life of knowledg and prediction, too short. Complexit is compounded when the essentia ambiguity and unpredictability of th strategic environment merges with th physics of force design—time an cost. Raising, training and equippin forces takes time and money. What th Army has now must last; what it wi build must last even longer—and suc ceed in a future certain to be differer from that envisioned. The belief, fo example, that one could build a nich force, anticipate when that forc would no longer be useful and buil a new one to match an emergent en emy simply flies in the face of th physics of force design and the histor of American intelligence's predictiv ability.

What practical guides might help this essence/physics paradox? A set three principles: First, avoid optimizin the Army's force structure; Second, i crease Army depth and flexibilit Third, increase innovation.

Optimizing ground forces in th face of uncertainty is the height strategic folly. When faced with such wide range of possible scenarios u der which Army forces might have operate and succeed—especially th Army of a nation with global inte ests—one must expand, not limit, o tions. Depth, flexibility and innovati go together.

The strategic environment will c mand that the Army bring together leaders, soldiers and units with thc of other services, agencies and natio in ways that fundamentally dif from whatever is envisioned. Insuf cient depth, flexibility or innovati will limit the options available r only to America's strategic leaders b also to Army operational and tacti leaders. These principles illumina three aspects of Army force structu and design.



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The Army lacks sufficient depth. It is mostly fixed and too small. Many are concerned about the stress on our forces and families, and for that concern, all are grateful. The recent announcement to increase Army end strength is as welcome as it is necessary. The pace of operational deployments has not dropped significantly, nor will it. We are fighting a global insurgency, a protracted war. Although we tried to make it short and decisive, the nature of the conflict will not allow it. Our enemy will not just give up; they will move to other theaters even when we push them out of Iraq and Afghanistan. Moreover, given the world we live in, we must understand that other contingencies will emerge, ones that we will not have predicted. If we could not fully predict or appreciate the speed at which our financial world changed in the past year, how can we assume that the international security environment will be any more stable or our ability to predict the next crisis any more reliable?

The Army's flexibility is too limited. Flexibility is limited first by having too few units to employ. It is also limited by having an insufficient industrial base and too little transport. The pace of adjusting the equipment of an army is not just a function of what is on hand; it is also a function of how quickly an operational need can be manufactured and delivered. The Army's flexibility is limited further by having an insufficient number of officers and sergeants. This deficiency can be seen in the fact that many new headquarters are staffed by "robbing Peter to pay Paul," a method also used to staff many advisory formations and to fill existing units to a 24/7 capability.

Innovation in the Army is mixed. The innovation of our officers, sergeants and soldiers in the field is unquestioned and unmatched—not so when one looks at the processes that generate and support the fielded forces. The level of creativity, speed or consistency with which our bureaucracies identify and gain access to capabilities in the Army is sufficient. How quickly will our bureaucracies be able to translate the recent end-strength authorization into fielded capabilities? Speed matters in war. Designing forces is not just about the number and types of units of employment. It is also about having processes in which the norm is creating new capabilities out of existing organizations, adapting methodologies in ways not previously envisioned and reshaping organizations—all at the speed of requirements. Such innovation is not the strong suit of Army bureaucracies—the very bureaucracies charged to design forces in an era of ambiguity and unpredictability.

The Army will not return to its relatively stable past; rather, what we are experiencing is the new "norm." The question of how to design forces in a strategic environment of ambiguity and unpredictability is not just a question of either avoiding the conventional and niche camps or determining how many combat, combat support and combat service support units are needed and of what type. To approach the problem in either of those ways demonstrates a fundamental misunderstanding of the task at hand.

Leaders Wanted

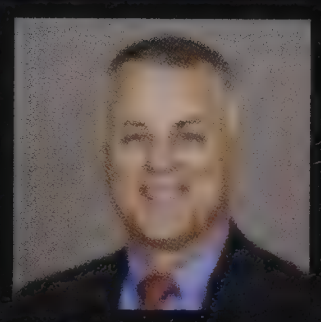
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The Army will have to apply the perspectives of depth, flexibility and innovation to its active and reserve components as well as its operating, supporting and generating elements. The Army also has to argue against optimizing in the face of constant and unexpected change and the resultant unpredictability. But in the United States, security is a shared responsibility. The Obama administration and Congress have important obligations in seeing that the Army and its sister services are resourced commensurate with our national interests and strategy as well as organized to fit the strategic environment in which they will employ our forces. Fixing some of the limitations of depth, flexibility and innovation is beyond the Army's reach, for some limitations are found in law, policy or regulation.

In the kind of strategic environment we face, designing forces is also about designing systems—inside the Arm and outside—that govern, support o generate those forces. A Quadrennia Defense Review that focuses only o threat descriptions and derived forc requirements will miss the target.

***LTG James M. Dubik**, USA Ret., is former commander of Multi-Nationa Security Transition Command-Iraq an a senior fellow of AUSA's Institute Land Warfare.*

More Evidence of a Self-Imposed Military Quandary

By Richard Hart Sinnreich

Two stories this summer about the escalating struggle in Afghanistan reveal the impact of the self-inflicted dilemma confronting U.S. forces and their NATO allies as they try to defeat still another stubborn insurgency while satisfying unprecedented humanitarian restrictions and requirements.

The first reported an unintended but inevitable side effect of recent directives restricting the use of close air support of troops in contact in an effort to curb civilian casualties. According to the story, when, in July, a crew of Taliban insurgents pursued by marines took shelter inside a house believed to contain Afghan noncombatants, the marines were compelled to hold their fire until the civilians cleared out.

After they were gone, the marines assaulted the house, only to find it empty. Dressed as women, hence untouchable by Allied soldiers, the Taliban had evacuated along with the residents. Their escape may well cost other allied troops and/or Afghan civilians their lives.

The second story, an op-ed entitled "Trampled by the 'Civilian Surge'" in the July 10, 2009 *Washington Post*, criticizes the military provincial reconstruction teams (PRTs) that have become central to U.S. efforts to balance combat operations with humanitarian development—the "hearts" part of winning hearts and minds.

Author Anna Husarska, a senior adviser to the International Rescue Committee, a nongovernmental humanitarian organization that has been working in Afghanistan since the late 1980s, contends that efforts by the military to perform humanitarian services often do more harm than good.

"PRTs are a military tool attempting to perform civilian tasks," she argues. "Inherently, they undermine the necessary distinction between the development objectives of humanitarian aid workers and the political-military objectives of coalition forces."

That attitude among officials of nongovernmental organizations (NGOs) is by no means unusual. To some extent, it reflects a quasi-ideological desire to avoid identification with particular political agendas, and in part NGO personnel's understandable preference not to be perceived by their clients—still more by combatants of any stripe—as military wolves in humanitarian sheep's clothing.

Even discounting that bias, however, Ms. Husarska's criticism of the "civilian surge" accompanying the increase of troops in Afghanistan reinforces a fair amount of other evidence that cumulatively challenges a central thesis of contemporary counterinsurgency doctrine: that the way to defeat an insurgency is to secure the loyalty and support of the civilian population.

Historically, in fact, very few counterinsurgency campaigns have succeeded in that manner, even when conducted by native governments, let alone by foreign occupiers. Instead, sadly, most such campaigns, from Rome's defeat of the Judean Revolt in 66–70 CE to Russia's continuing suppression Chechen separatists, have been disti guished by unblinking ruthlessnes and have succeeded only after the e haustion or outright annihilation of t insurgents and those supporting them

Which takes us back to our ha less marines in southern Afghanista where, CNN reports, improvised e plosive device attacks on allied forc have increased during the last fe years by more than 1,000 percent, a Taliban ambushes and attacks on is lated installations—the very sort call for by today's "clear, hold and buil strategy—have increased commens rately.

In response to which, our own str egy, apparently, is to fight a kind and gentler war. As one U.S. milita spokesman reportedly said recent "We are not saying that the enemy going to get a free pass. But in stances when our forces can ma the decision to de-escalate, they ha an opportunity to more deliberat work their way through the proble

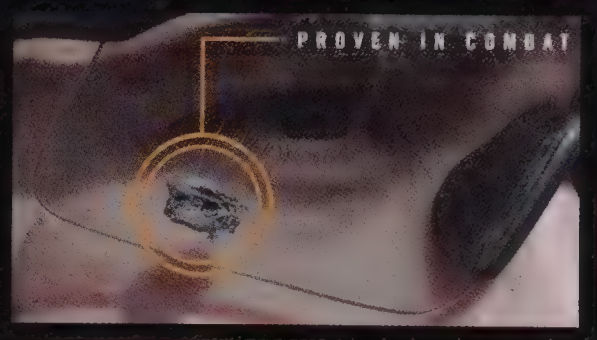
Parsing that second convoluted s tence, the implication seems to Better to allow the Taliban to fight a kill another day than take the risk killing or injuring noncombatants– at least, apparent noncombatants– ensure that they don't.

By which reasoning, of course, U forces invading Germany in 1945 pr ably would have met the Russian the Rhine instead of the Elbe … assu ing that we had survived our own C

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War as one nation, rather than two.

Of course, it's entirely possible that the world indeed has changed—that what formerly required mass killing and the recognition by civilians that the presence of insurgents in their midst made it likely that Bad Things would happen today can be accomplished in a more civilized way by building schools, digging wells, conducting spot physicals and, above all, avoiding violence wherever possible.

If so, however, the new dispensation seems thus far not to have convinced our adversaries, who continue cheerfully to behave the way insurgents always have behaved, doing whatever seems necessary to make life miserable for—or deny it altogether to—anyone who declines to support, let alone opposes, them.

We all hope, of course, that events ultimately will prove our new counterinsurgency strategy to be correct and that too many young Americans won't have to die in the process of proving it.

But if it turns out that we're wrong let's also hope that someone with the necessary credentials has the courage to admit it so that future American political leaders will know what they're getting us into when they decide to remake someone else's country by force.

***Richard Hart Sinnreich** writes regularly for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the July 12, 2009* Lawton Constitution *and is reprinted by permission of the author.*

Continual 'Organizational Learning' While Operating

By COL Dick Pedersen
U.S. Army retired

Commanders must continually act in order to learn. Just as important, they must create a system for learning as they act. … A commander will not be able to understand the problem fully before beginning operations to solve it and will learn more about the true nature of the problem as he operates. … The initial framing of the problem establishes … a baseline for learning about the problem as the force operates.
—Commander's Appreciation and Campaign Design

A major Army campaign plan objective is to improve capability and capacity for irregular warfare, among other things. As an initial output of this quest, a cognitive model was developed for commanders charged with designing, planning and executing military campaigns. The *Commander's Appreciation and Campaign Design*, a Training and Doctrine Command pamphlet published in January 2008, is an emerging concept intended to develop shared understanding of complex operational problems leading to the design of broad approaches for problem resolution. This methodology was proven to have great potential in the Chief of Staff of the Army's future study program Unified Quest in both 2008 and 2009. The School of Advanced Military Studies has been experimenting with this and various other design concepts since 2007 in an effort to determine how to transform design theory and philosophy into practical applications. Commanders in the field are in dire need of practical solutions because the persistent conflict we are involved in is a competitive *learning* environment in which intellectual challenges grow increasingly significant.

There is a dilemma in institutionalizing design into doctrine. On one hand is the notion that there is no formulaic way of presenting design and any attempt to do so moves away from a path of better understanding. On the other hand, a design philosophy by itself is too broad to function as a guideline for action. What is needed lies between the rigid precision of a technique and the abstract wisdom of a philosophy. Collaborative design implies continual learning, so units must organize to learn, adapt and continually redesign while operating. Since Operations Enduring Freedom and Iraqi Freedom began, tactical organizations at every echelon have been conducting sustained operations over long periods of time. Brigades and battalions are already producing their own versions of campaign plans because they have found this the best way to articulate a broad set of ideas about how to solve ill-structured problems in complex environments over time. Although these plans probably do not link a series of related major operations aimed at achieving strategic and operational objectives within a given time and space, they serve the vital purpose of outlining what the unit seeks to accomplish on its 12–15 month combat tour. Problems arise when incoming units' various frameworks of thinking are incompatible with those of the units they are replacing. Suffice it to say that commanders are looking for, and are in need of, help. What is needed is a way to rapidly and continually evolve and share reliable mental constructs of the problems at hand.

The Army is developing a design concept intended to better enable future forces at corps level and below to successfully conduct full spectrum operations. This concept currently takes the form of an issue paper intended to become a chapter in the new field manual (FM) on the operations process, FM 5-0, scheduled for publication in October.

Three specific facets of this concept are currently under examination: how the concept can be integrated into the operations process in a way that improves the capability of Army forces to make meaningful contributions to successful unified actions; how such a concept oriented on campaigns might be adapted to support decision making that is more time-compressed than campaign planning; and how large

units and senior leaders contribute to earning during operations. In essence, he Army is seeking effective ways for units to organize to learn, adapt and continually redesign throughout an operation. Their intent is not to prescribe campaign planning at the operational level of war, but to provide a *general way* for corps and below to establish a framework for continual organizational learning while operating.

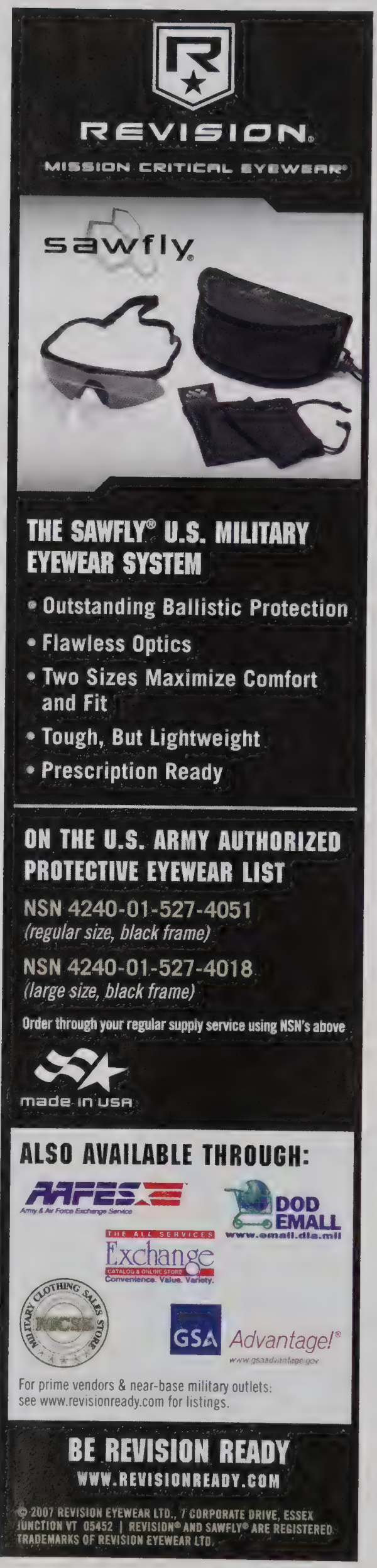
Understanding is an appropriate new addition to how the Army has traditionally defined battle command. Battle command is the art and science of understanding, visualizing, describing, directing, leading and assessing forces to impose the commander's will on a hostile, thinking and adaptive enemy. Learning about the enemy and the operational variables enables commanders to develop an understanding of the situational context and to frame operational problems. Commanders currently balance time and resource demands among four major activities in a continuous learning and adaptive cycle called the *operations process,* which consists of the major command-driven command-and-control activities of planning, preparing, executing and continually assessing operations. Although the Army very appropriately added *understanding* to its notions of battle command, there have been no such refinements that effectively enable the operations process to support commanders' gaining of the requisite understanding. A flexible framework for *organizational learning* needs to somehow be incorporated into the operations process in order to allow commanders a better understanding of the operational environment and of the problems requiring solutions, and to inculcate organizational learning while operating throughout the command.

A suitable framework for organizational learning must be a nonlinear, interactive, continuous, cognitive activity used to structure inquiry to understand the operational environment and make sense of complex problems. The command must organize for critical inquiry through questions and discussion of existing knowledge of the operational environment. The framework must encourage the development of models or theories to compare against the operational environment.

Given higher directives, conditions are formulated that define desired end states, and then approaches are developed that aim to achieve those conditions. This cycle of inquiry, contextual understanding and synthesis includes rigorous debate and collaboration within available time constraints. This affords commanders opportunities for enhanced understanding so that they can better envision feasible, acceptable and suitable operational concepts.

The tentative framework for organizational learning under examination consists of two major activities: framing the operational environment and framing the problem. Learning activities are multidimensional because discourse considers not only the operational variables in time and space, but also relevant knowledge of the composite of conditions, circumstances, influences and hypotheses that affect the employment of capabilities and bear on the commander's decisions. The environmental frame includes graphic and narrative descriptions that capture the history, current conditions, future goals, relevant participants, tendencies and potentialities within the operational environment. This enables visualization of the environment in terms of not only enemy, adversarial, friendly and neutral actors, but also in the context of the political, military, economic, social, informational, infrastructural, physical environment and time variables. The problem frame is a refinement of the environmental frame that develops descriptions of tensions between relevant actors, risks and resources. Ultimately, the problem frame synthesizes what has been analyzed, and it articulates problem sets and actions proposed to move from current to desired conditions.

This tentative framework for organizational learning was examined by the Battle Command Battle Laboratory's experiment Omni Fusion 2009,



conducted at Fort Leavenworth, Kan., in July. Omni Fusion 2009 was an experimentation campaign focused primarily on a division-level commander's initiatives group serving as a design team for a commander faced with ill-structured problems in a complex full spectrum environment. The intent was to effectively educate and train members of this commander's initiatives group to develop various design concepts by employing the methodology outlined in the Combined Arms Doctrine Directorate's design issue paper. Overall experiment design revolves around effectively establishing a framework for organizational learning while operating and then actually experimenting with how it might work. The desired experimental output includes informing the three facets of organizational learning mentioned previously. Omni Fusion 2009 has the potential to positively influence how both *design* and *organizational learning* are codified into Army doctrine, improving the capability of Army forces to make meaningful contributions to successful unified actions.

***COL Dick Pedersen**, USA Ret., is the senior battle command analyst at the Combined Arms Command Battle Command Battle Laboratory at Fort Leavenworth, Kan. His final tour on active duty was as commander of the Battle Command Training Program from 2005–08.*

Forty-One Years Later ...

By Robert E. O'Brien

It is not as though I've been asleep for the last 40 years or that I've lived a life so appallingly boring that, understandably, my mind might be frozen in time. To the contrary, I've lived what most say has been a varied, if not an extraordinary, life, having worked as a roofing laborer, New York City Police officer, respiratory therapist, bellhop, cabby and, ultimately, a crisis intervention teacher/unit coordinator at a site for the emotionally disturbed in Brooklyn. (It was from this endeavor that I ultimately retired.) A friend of mine jokingly called my existence Zelig-like, referring to the central character in one of Woody Allen's movies. I spent several years in most of these occupations, enough time to absorb the realities of these existences as only time can reveal. However, I find my thoughts returning again and again to events that precede all of that—my service as a young soldier in the Vietnam War.

It was not until I approached 40 that the French aphorism, "By 40, physician or fool," started to take hold in me. Certainly, during the years before I entered education, I was often chided—and I'm sure, criticized—by many as



e'er-do-well. After all, I did have a achelor's degree at that point, and my esignation from the police was re-arded by many of my friends in the ish-American community as a pre-de to psychosis. (In fact, a friend of y wife always inquired about my cur-nt employment status. Once I was tabilized," she inquired no more—little schadenfreude?) I was always oking for a "place to stand," if you'll low me to corrupt the words of e philosopher Archimedes. I can say ithout reservation that my perfor-ance in the things I've worked at has nged from satisfactory to excellent. espite what appears to be occupa-onal meandering, I did possess a ork ethic, something no doubt im-ressed upon me by my father. He told e of the Irish immigrants during the epression (of which he was one), who ould often pass one another saying, God bless the work!" Work, my father ould tell me, was central to a man's e. His willingness and capacity to ork defined him as a man. More im-rtant to me, however, has been my me life. Truly, I feel blessed with a nderful wife of 34 years and a son.

Still, despite all my family memories, all the vacations, Christmases and vers, nothing has ever completely pplanted my recollection of Viet-m. One of my college professors, Dr. o Lieberman, who wrote a reference r me for graduate school, never ew I served in Vietnam. He said, ou never told me," and I responded, never came up." It was not that I as ashamed—to the contrary—but hat I did learn was that serving in etnam was a "disconnect" in college the early 1970s. My service certainly as not a chick magnet. Whenever I to explain the depth or pervasive-ss of my feelings regarding the war, mind often goes to Walt Whitman's em: "As toilsome I wander'd Vir-nia's woods." He speaks about stum-ng upon a hastily written marker iled to a tree above a grave: "... bold, utious, true and my loving com-de." He goes on to speak about how oughout his life, through many a hangeful season," that marker above

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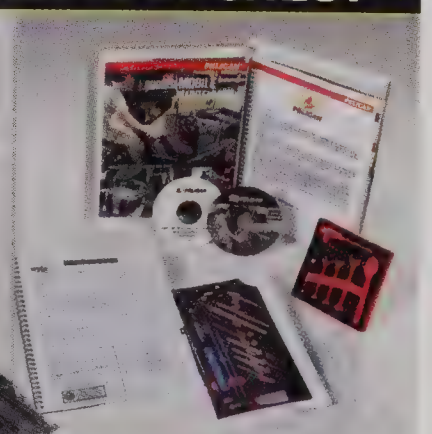
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the grave comes back to him. So it is with me and Vietnam.

Fortunately, I did ultimately get on with my life; in truth, there was a bout with pills and alcohol. With the grace of God, these were a detour, not a cul de sac. Always and with increasing frequency, the war comes back to me. It is not the horror that I recall or am compelled to relive, but rather the mundane day-to-day actions with my comrades—a word now tainted by communism, but somehow so much weightier than *buddies*.

Anyone somehow acquainted with these feelings knows how timeless they are. The 1946 film "The Best Years of Our Lives," a film about three veterans returning to a small town from World War II and starring Dana Andrews and Fredric March, poignantly sets forth the dilemmas facing many returning veterans. The story is as true for veterans of the wars in Afghanistan, Iraq, Vietnam and Korea as it was then.

There is something inexplicable about war and its impact on veterans, whether it is the St. Crispin's Day feeling or the feelings of those who lost more than they can ever hope to regain. Each generation or so, we ask a new crop of men—and now women—to forgo the normal passage of life and instead embark on the warpath. Some will survive the ordeal relatively unscathed; others will, like soldierly "ancient mariners," remain arrested or transfixed with a tale and time that only their comrades can fully understand.

Nothing has ever served to replace those years for me. Like a mental time traveler, I return to them everyday. What is it about war—the horror or the camaraderie and sense of purpose — that's written upon our souls with India ink? I returned from Vietnam at the age of 20 as an infantry sergeant. I was shot over there and report somewhat immodestly that I served with distinction. Ultimately, regardless of what other achievements or accomplishments I've known, those years have somehow eclipsed everything, leaving me now in a cycle of memories still clear and apparently timeless.

It is not the worst of fates. There is honor in serving one's country. Th fact that we were given little acknowl edgement or respect for our effort back then plays little on my min these days; that's not to say that I fo get the hypocrisy of many who cor demned us. What happened to th Chicago Seven? If I recall correctly, a went on to live comfortably middl class existences just like those of the parents, who they condemned. Se eral of them even worked directly indirectly for the government.

Like love songs, some themes r create themselves over and over agai I know that many other veterar have traversed the mental landscap through which I journey and, it seem will inhabit forever. All too often th constant remembering is the legacy war for those who survive it. As Pla said, "Only the dead have seen t end of war."

Robert E. O'Brien *received the Silv Star, Bronze Star and Purple Heart f service in Vietnam. He now resides Canadensis, Pa.*

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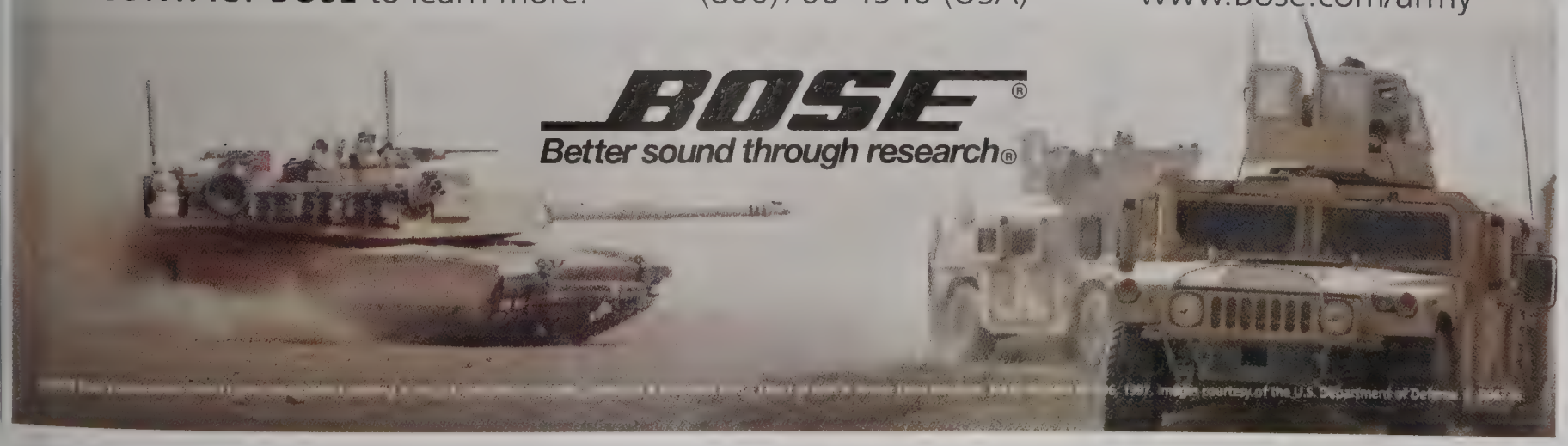
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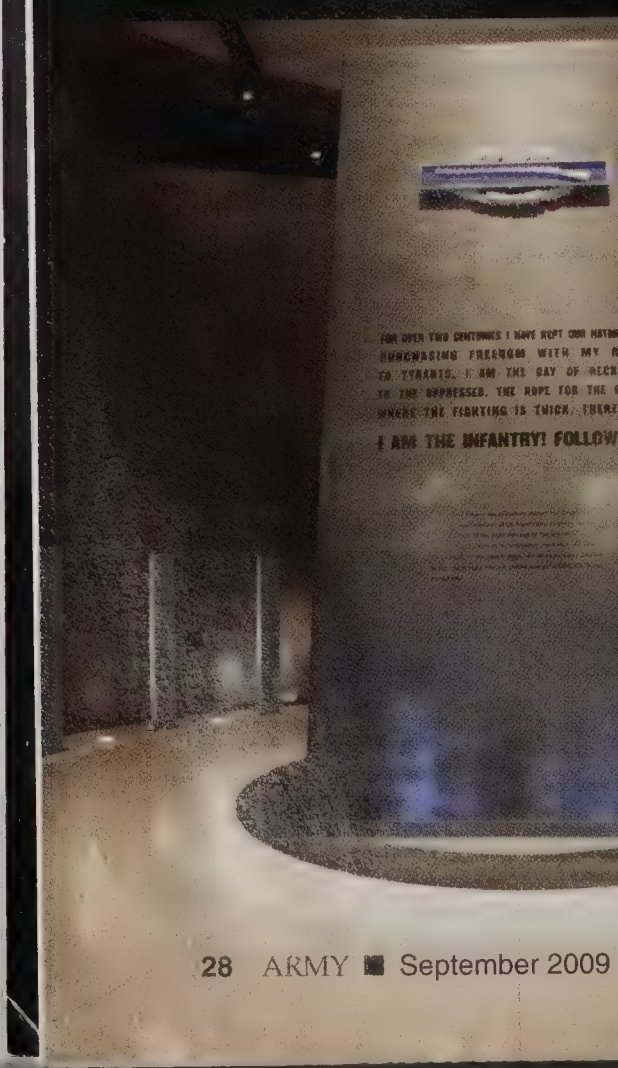
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THE NATIONAL INFANTRY MUSEUM AND SOLDIER CENTER

Photographs by Dennis Steele



Left, the entrance to the National Infantry Museum's centerpiece "Last 100 Yards Ramp"—a multimedia walk-through exhibit that takes visitors through major battles of America's wars. Right, the diamond studded marshal's baton carried by Hermann Goering, the Nazi Reichsmarschall *captured at the end of World War II, is among the artifacts on display.*





Above, weapons and uniform items from the Spanish-American War. Below, (left/right), the entrance to the Cold War Gallery and a gallery exhibit.



The recently opened National Infantry Museum and Soldier Center in Columbus, Ga., honors the history and sacrifices of the U.S. Army infantryman. Situated adjacent to Fort Benning, the complex features a spectacular main museum building and Patriot Park—composed of a 5-acre parade field that is used for many Fort Benning events, including Infantry advanced individual training graduation ceremonies—and World War II Street, an authentically recreated company street from the 1940s with a chapel, barracks, mess hall, and the headquarters and sleeping quarters once used by GEN George S. Patton Jr.

The main museum building houses exhibits that trace Infantry history from the Colonial era to the present. State-of-the-art walk-through exhibits begin with the central "Last 100 Yards" ramp that leads visitors through a series of multimedia displays depicting historic battles and wars. The museum's gallery level has six individual galleries devoted to defining eras in the nation's history and the infantrymen who fought the wars that defined those eras. A gallery dedicated to the Army family and a central display in the Grand Hall that honors soldiers who have been awarded the Medal of Honor round out the exhibits. The museum building also houses an IMAX theater.

Accessible to the public, the National Infantry Museum and Soldier Center is located on Legacy Way outside the fort's security gate. Admission is free, and the museum is open seven days a week, closed only on Christmas and New Year's Day. The hours are 9 A.M. to 5 P.M., Monday through Saturday, and 11 A.M. to 5 P.M. on Sunday. For more information, see the museum's web site: www.nationalinfantrymuseum.com. ★





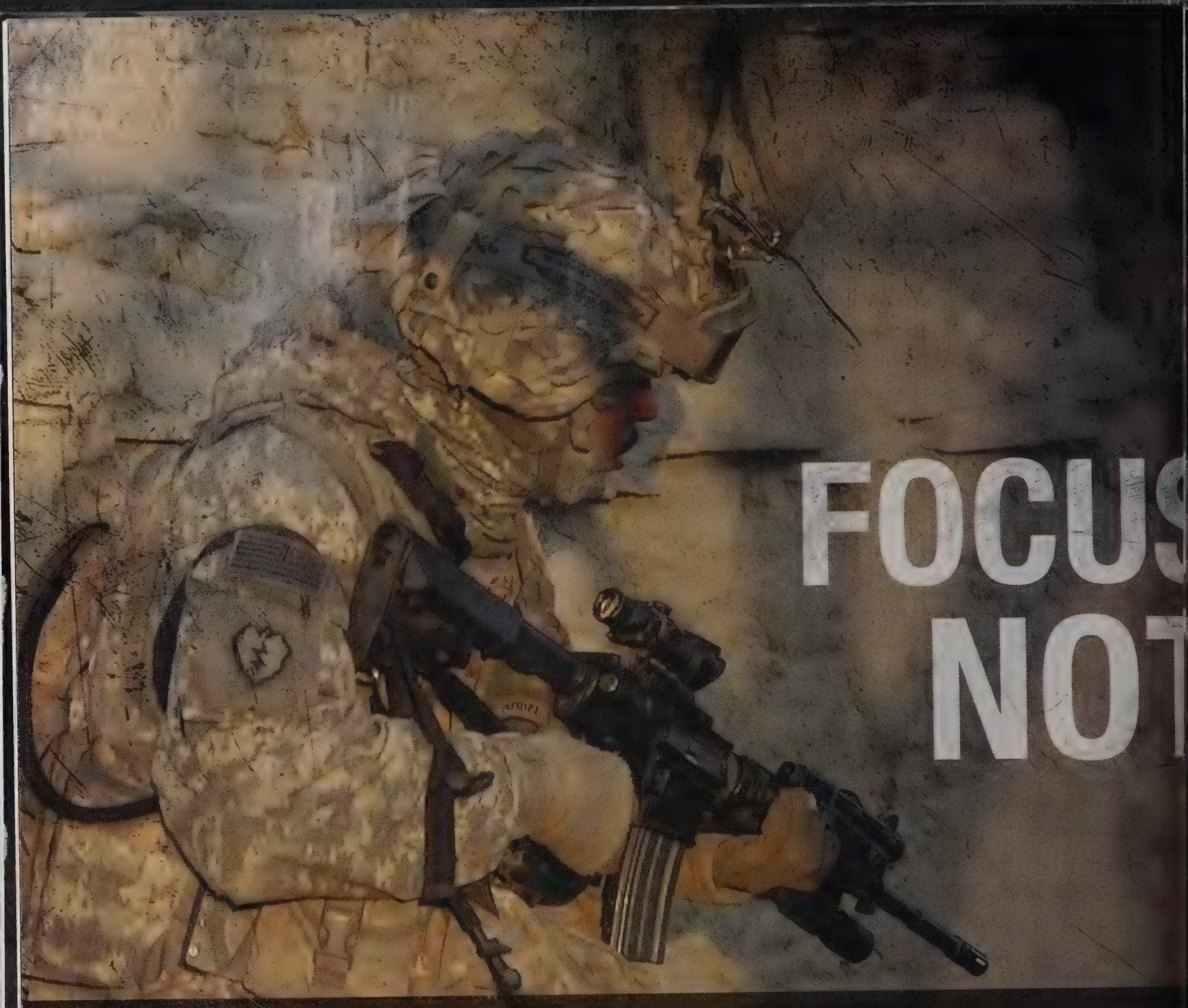
Above, a multimedia World War I trench exhibit. Below, the depiction of the Korean War bayonet charge led by then-CPT Lewis Millett, for which he was awarded the Medal of Honor.



Above, a display depicts Vietnam War infantrymen stepping from the iconic UH-1 "Huey" helicopter. Left, recipients of the Medal of Honor are venerated by a display in the museum's Grand Hall.

A multimedia display depicts the U.S. Army Rangers' scaling of the Pointe du Hoc cliffs on D-Day.

Left, the National Infantry Museum's Grand Hall. Above, the main building at night.



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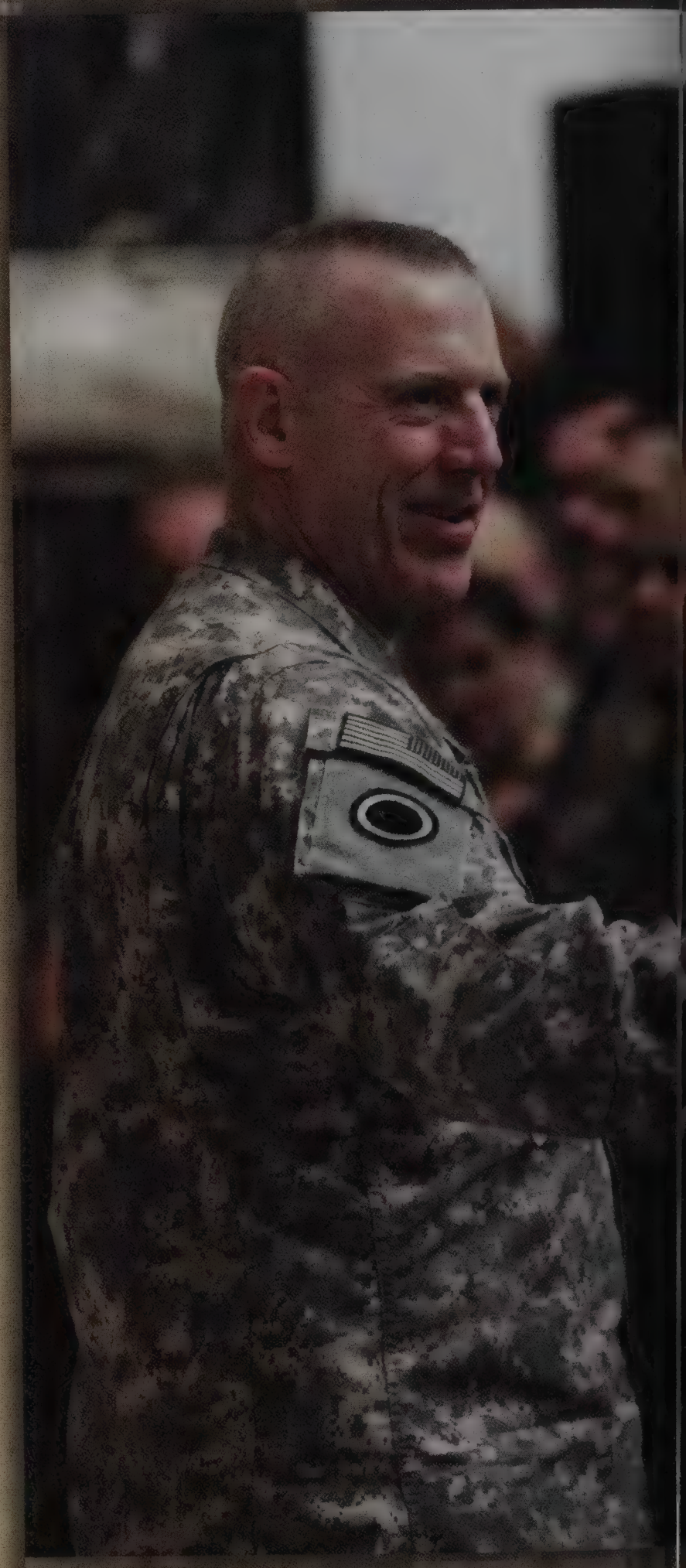
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Back in the Fight—I Corps As Multi

By BG Peter C. Bayer Jr.

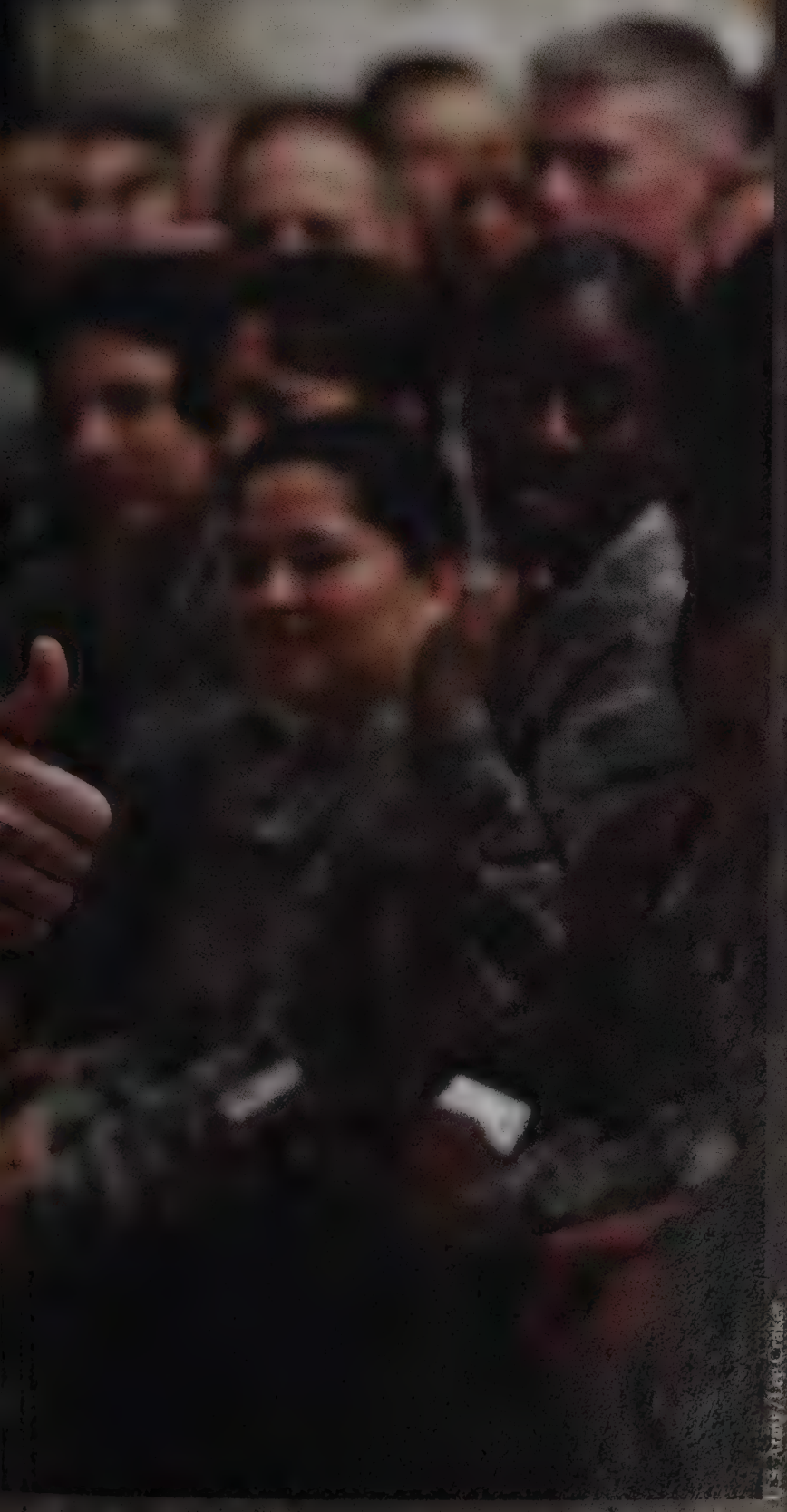
In April, I Corps assumed command of Multi-National Corps-Iraq (MNC-I) from the outgoing XVIII Airborne Corps. After a 38-year hiatus, I Corps, historically known as America's Corps, was back in the fight. Now in the middle of its rotation as Headquarters, MNC-I, it is the last U.S. Army corps to deploy as MNC-I, executing its first deployment as a corps headquarters since the Korean War.

Just a few years ago, deploying I Corps into a theater of operations outside the Pacific Rim would have been hard to envision. The 2007 Army global force reposturing plan made I Corps one of three deployable corps headquarters. At that time, the I Corps staff numbered fewer than 400, with its operational focus limited to Pacific contingencies, security cooperation and reserve component training. The journey to transform into an enhanced headquarters commanding Coalition forces,



National Corps-Iraq

CSM Frank Grippe, Multi-National Corps-Iraq (MNC-I) I Corps senior enlisted advisor, addresses soldiers at Al Faw Palace at Camp Victory, Iraq, before the arrival of President Barack Obama in April.

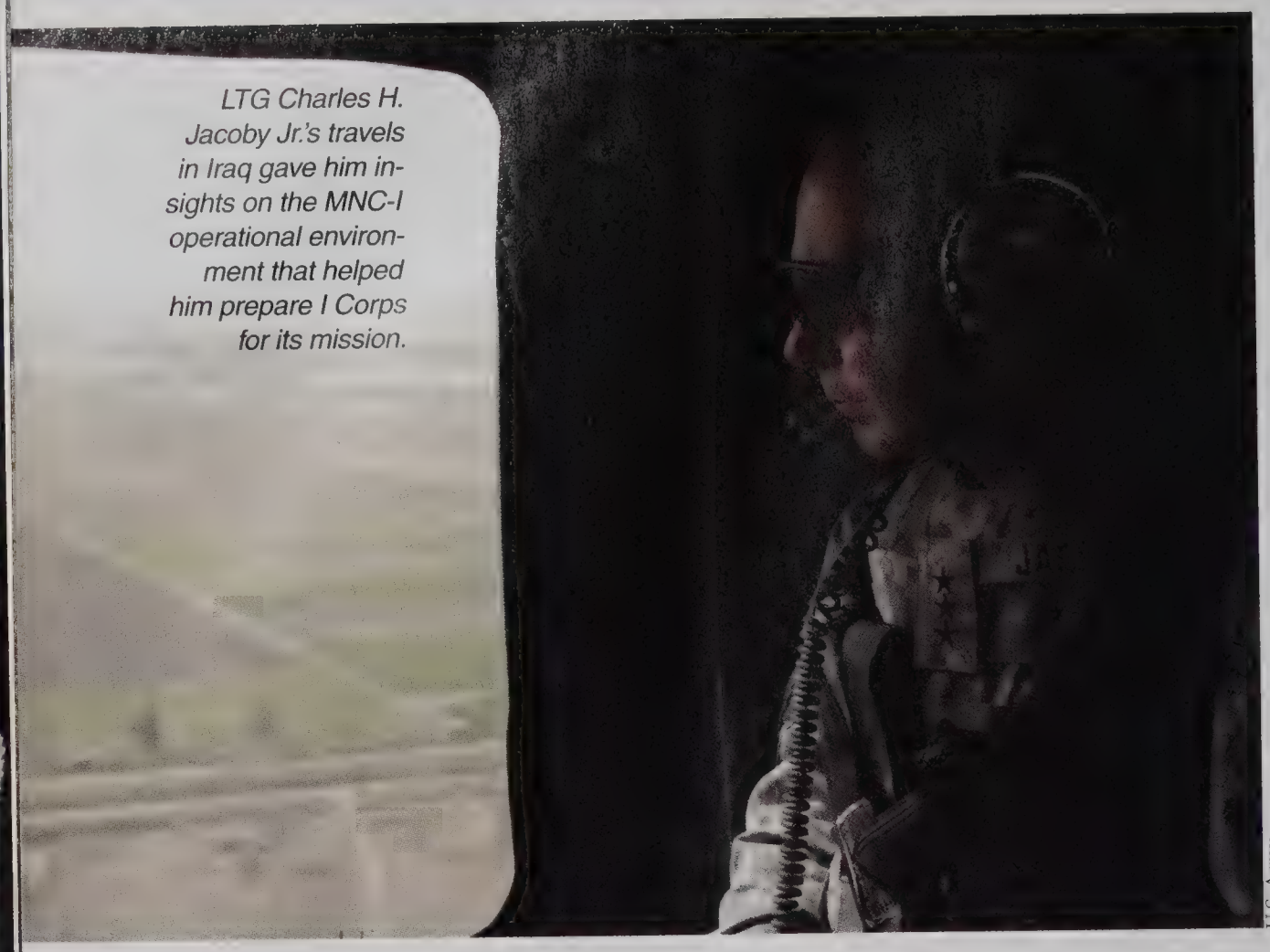


I Corps—America's Corps

Organized in January 1918, I Corps was forged in France during World War I, tempered in New Guinea and the Philippines during World War II, and honed to a fine edge during the Korean conflict. Having served in 20 named campaigns over its lifetime, it is the most decorated corps headquarters in the Army. Because of its soldiers' heroic efforts, I Corps received the U.S. Presidential Unit Citation (Army) as well as the Philippine and Korean Presidential Unit Citations. During the undeclared "Second Korean War" (1968–69), I Corps (Group) commanded two U.S. Infantry Divisions as well as a Korean army corps along the western sector of the demilitarized zone. Although it provided a command element for northern Iraq in 2004, I Corps has not deployed the entire headquarters since the Korean War. Today I Corps carries its proud legacy to the Middle East to command three divisions and a Marine Expeditionary Force while serving as Multi-National Corps-Iraq.



I Corps staff in Korea circa 1950. America's Corps, now in the middle of its rotation as Headquarters/Multi-National Corps-Iraq, deployed as a corps headquarters this year for the first time since the Korean War.



LTG Charles H. Jacoby Jr.'s travels in Iraq gave him insights on the MNC-I operational environment that helped him prepare I Corps for its mission.

U.S. Army

partnering with Iraqi security forces and assisting in the development of Iraq's democracy was under way. Preparations included increased staffing, fielding new equipment and changing the culture within the Corps.

A New Culture

I Corps continued to play a large role in Pacific Command's theater engagement strategy during 2007 and conducted four major exercises. During this same period, the Corps leadership completed a gap analysis to establish requirements for full operational capability. The team visited the Pentagon to request assistance from the Army Staff and gained assurances that the Corps would be staffed and equipped to meet its mission. The established individual and organizational training requirements would ensure that the headquarters was physically ready. The challenge for Corps leadership was to prepare the organization intellectually for the mission.

I Corps would arrive during unprecedented change to the operational environment, with the new security agreement turning over more and more responsibility to the Iraqi security forces, a growing shift in the mission from counterinsurgency to stability operations and the beginning of the U.S. drawdown of forces. The requirement to increase the professionalization of the Iraqi army and police through aggressive partnering would become essential.

The Corps would arrive in Iraq in time to begin the detailed planning that will culminate in a merger of six existing headquarters into a single headquarters—U.S. Forces-Iraq. The Corps staff and leadership had to cultivate a mind-set built around the changing mission and operational environment.

Training and Preparation

Training and mission rehearsal exercises occupied much of the summer and fall of 2008. Along the way, I Corps staff established exceptional relationships with their MNC-I counterparts in XVIII Airborne Corps. This included outstanding cooperation at every level, from the two commanding generals to every staff section. In an innovative move, I Corps' long-range planners deployed early and integrated into the existing MNC-I staff. This helped the Fort Lewis, Wash., team develop early situational awareness and get a jump on planning before the transfer of authority. I Corps subsequently phased in future plans, then future operations before finally taking over current operations at the transfer of authority. This tack allowed for reduced friction and increased continuity during the pre- and post-transfer of authority periods.

During the Corps' preparation, personnel and equipment arrived at an increasing pace. The Corps upgraded its automated command-and-control systems and prepared to deploy its analysis control element. By summer 2008, a modified table of equipment and organization raised I Corps personnel billets above the 800 mark, making I Corps the largest corps headquarters in the Army inventory.

A senior leaders' conference in September 2008 gathered commanders inside and outside the Corps for discussion about the mission. Nearly all future MNC-I subordinate commanders were present. The goal was to build a team and cultivate a vision that would be tested against reality in Iraq by the commanders who would serve together under the MNC-I colors.

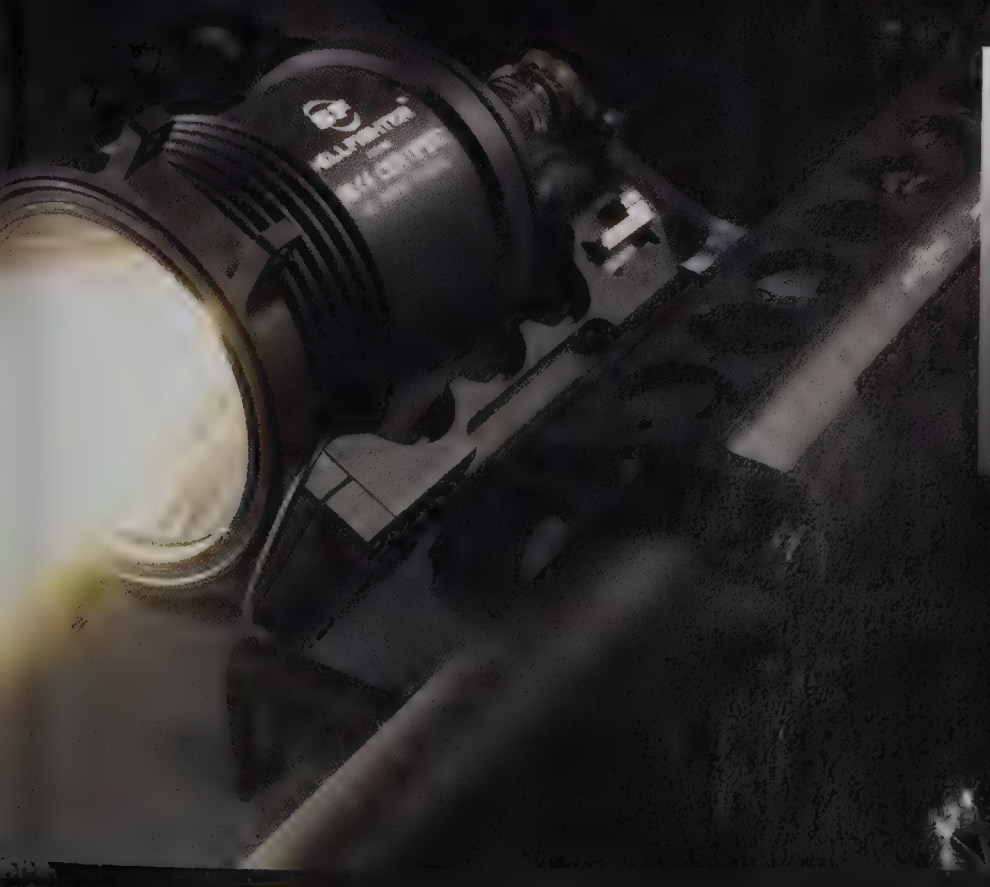
By October 2008, I Corps completed its transformation achieving full operational capability and certification as a Joint headquarters. Its agile soldiers were prepared for any contingency in Iraq, small or large. After one last counterinsurgency-focused mission rehearsal exercise, the Corps would move out to Iraq.

BG Peter C. Bayer Jr. *has served in command and staff positions in the United States, Germany and the Middle East. He served as the operations officer (G-3) of the 3rd Infantry Division (Mechanized) at Fort Stewart, Ga., and in Kuwait and Iraq during Operation Iraqi Freedom I. While deployed in support of Operation Iraqi Freedom III, BG Bayer served simultaneously as commander, 11th Armored Cavalry Regiment, and as the Multinational Force-Northwest chief of staff in Mosul, Iraq. BG Bayer is currently serving as the I Corps chief of staff and has deployed with I Corps to be the MNC-I chief of staff.*

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Boots on the Ground and Iraqi Army Partnering

One of the first major efforts in assuming command of MNC-I was to increase the scope and intensity of partnership with the Iraqi ground forces command (IGFC). I Corps established a joint presence with the IGFC inside a combined partnership operations center (CPOC) at Camp Victory, Iraq, in May.

The CPOC is helping to synchronize efforts, enhance cooperation and create a climate of transparency between Iraqi and U.S. forces. The center represents an important milestone in establishing open lines of communication and coordination between our militaries. It is a positive reflection of our partnership with the Iraqis and the realization of the cultural preparation I Corps undertook before its deployment. I Corps' initiative capitalizes on the efforts of the Corps previously serving as MNC-I.

One of I Corps' hallmarks is its depth of experience working with other nations' armed forces, including those of Australia, Canada, France, Great Britain, the Philippines, South Korea and, more recently, nations of the Pacific Rim. The Corps has a history of building interarmy partnership and teamwork.

On June 30, Iraq witnessed a significant milestone as MNC-I and its subordinate elements began implementing sections of the security agreement that required U.S. forces to move combat forces out of Iraqi cities.

Urban security responsibilities now fall exclusively to the Iraqi security forces, while U.S. forces stand ready to advise, assist and support when requested. Although the change was spelled out in the security agreement, American and Iraqi units conducted detailed coordination to put the terms of the agreement into practice. An example of this cooperation occurred when the commanding generals of MNC-I and the IGFC conducted a joint video-teleconference with 52 subordinate commands to explain implementation of the security agreement and the "out of the cities" provision. LTG Charles H. Jacoby Jr., the MNC-I commanding general, described the meeting as an example of "partnership at the highest level," where American and Iraqi commanders had frank and open discussions regarding practical implementation of the security agreement.

The Corps' partnership is resonating with commanders at division level and below. This is no more evident than in Iraq's capital, where Multi-National Division-Baghdad (MND-B) works closely with Iraqi Maj. Gen. Abboud Qanbar, the Baghdad operations center commander. During a recent Pentagon press conference, MG Daniel Bolger, the MND-B commander, commented on that relationship.



U.S. Army

LTG Jacoby (left) tours the recently opened Abu Ghraib Fire Station in May. The I Corps commanding general emphasizes the importance of partnership with the Iraqis. The quality of the U.S.-Iraqi partnership will define the current operational environment as well as lay the foundation for enduring security in coming years.

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Then-COL Heidi Brown (left), deputy commanding general for sustainment, accompanied LTG Jacoby on a November trip to Basra, Iraq.

"He commands a much larger force [in Baghdad] than I do," MG Bolger said. "He has about 150,000 people in all, six complete Iraqi divisions. About a third of [the Iraqis] are in the army and another third in the various kinds of police. The rest are the Sons of Iraq, who are the local version of neighborhood watch, and they're very important in this war. They're the former insurgents who reconciled to our side … Gen. Abboud refers to them truly as his sons—not just sons of Iraq, but as his sons. He says, 'I treat them just like my own soldiers and police,' and he's been doing that."

The I Corps commanding general emphasized that partnership is the name of the game, all the way from general to private, especially in the cities. The quality of our partnership will not only define the current operational environment but also lay the foundation for enduring security in the years to come.

Enormous challenges lie ahead in the coming months. Iraq's second national election will take place in January. The election represents a milestone on Iraq's journey toward a stable and secure democracy. Although much rests on the shoulders of the Iraqis, I Corps and Multi-National Force-Iraq will stand by their side to make security gains permanent and to see the mission through to its completion. ★



MNC-I soldiers from Camp Victory work with 1st Cavalry Division troops and Australian Coalition soldiers to transport new furniture to a home for handicapped children in Baghdad.

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U.S. Army Africa: A Team Like No Other

By MG William B. Garrett III



When a U.S. Air Force C-17 landed at Kigali International Airport, Rwanda, in early January to airlift vital equipment to peacekeepers in Sudan, it marked a change in U.S. policy toward assisting in the Darfur peacekeeping mission. It also marked a change for the U.S. Army in Africa. Just a few weeks before, in early December 2008, Southern European Task Force (SETAF) began its transformation to become U.S. Army Africa, the Army component to U.S. Africa Command.

MSG George Duenas observes as SSG Chad Sloan explains infantry skills to a soldier from the Rwanda Defence Force (RDF). The two U.S. Army Africa NCOs spent a month mentoring RDF troops under a joint British-American program held at Gabiro, Rwanda.



CPT Charlie Jones, a U.S. Army Africa logistician, explains to a group of Ugandan soldiers how U.S. soldiers load equipment on aircraft. Jones' mentoring mission is indicative of U.S. Army Africa efforts—small teams of U.S. soldiers using unique skill sets and experience to mentor African militaries.

CPT Charlie Jones and SSG Brian Ruse, two U.S. Army Africa soldiers, were on the tarmac that day, assisting Rwanda Defence Force (RDF) soldiers with uploading the U.S. cargo plane. The team was sent to mentor RDF logisticians on how U.S. soldiers load aircraft and support logistical missions; they were at the right place at the right time. In early January, then-President George W. Bush authorized the airlift mission. On January 14, U.S. cargo planes landed at Kigali, where the RDF soldiers loaded their equipment using lessons learned from their U.S. Army Africa mentors. In turn, the partnership effort offered immediate support to multinational peacekeepers serving in Sudan's war-torn region.

This type of engagement is indicative of U.S. Army Africa's new role. Small groups of soldiers with unique skill sets partner with African militaries to share knowledge and information, allowing Africans to choose which ideas apply to their situations and empowering them to resolve problems their own way.

U.S. Army Africa spent the first weeks of 2009 gearing up for missions in Africa during Lion Focus, a two-week exercise conducted concurrently with a mission readiness exercise at the Joint Warfighting Center in Suffolk, Va., that prepared troops heading to Combined Joint Task Force-Horn of Africa. The goal was to improve the way our headquarters staff plans and conducts operations, with an Africa focus. It also gave U.S. Army Africa staff its first look at the road ahead, a major change from past operations. Based in Vicenza, Italy, SETAF supported NATO missions for more than 50 years, focusing primarily in Europe. Five times within the last 15 years, however, SETAF deployed assets to Africa in support of crisis-response operations.

U.S. Army Africa's new mission is twofold: conducting sustained security engagements with African land forces to promote security, stability and peace; and providing a contingency headquarters in support of crisis response. U.S. Army Africa staff have tackled their new mission, planning and participating in ongoing U.S. Africa Command missions and taking on new initiatives.

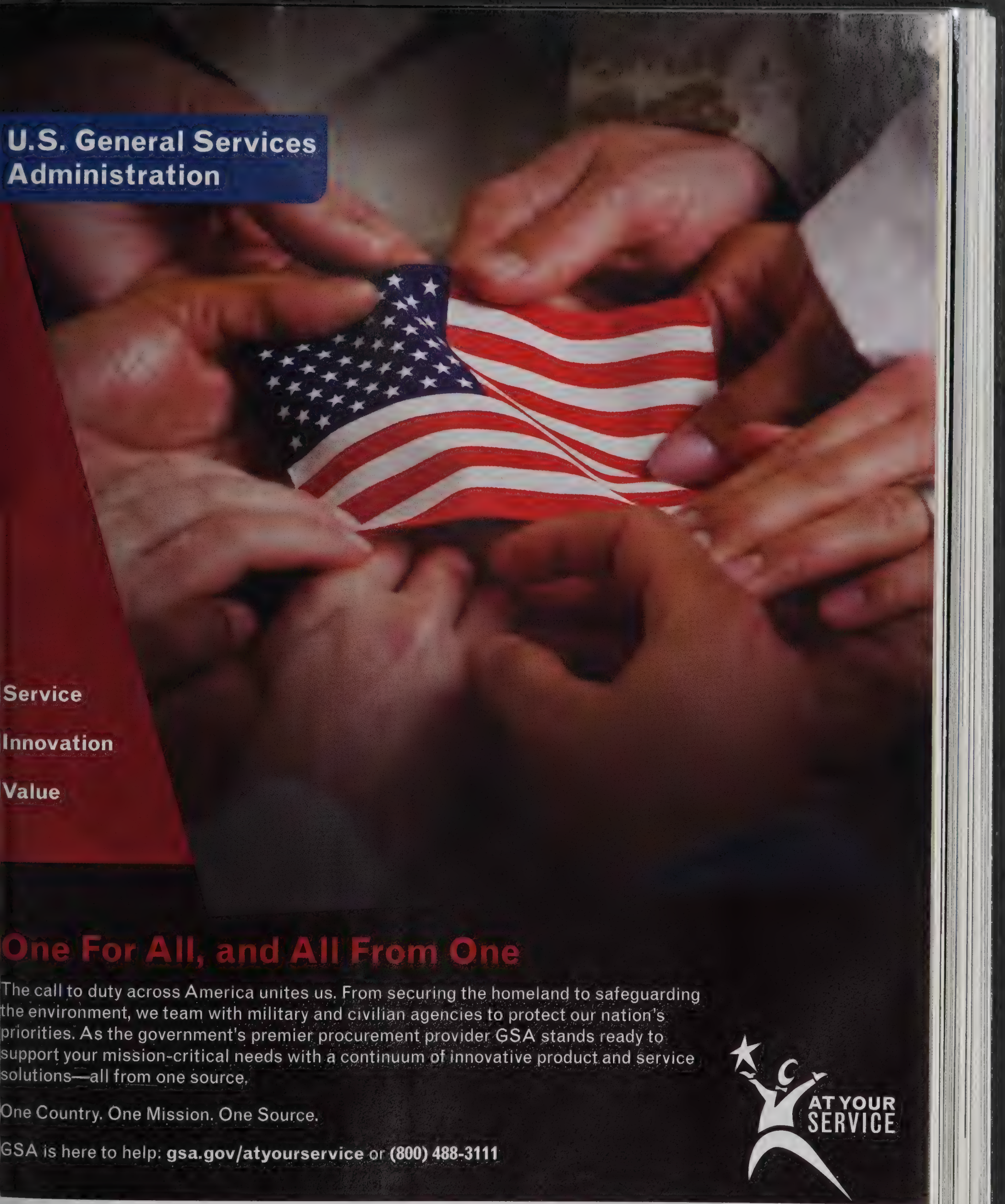
In February, a U.S. Army Africa officer went under way with the USS *Nashville* as part of the U.S. Navy's Africa Partnership Station, a training, goodwill and outreach mission to the five West African nations of Senegal, Ghana, Nigeria, Cameroon and Gabon.

In March, CSM Earl Rice and SSG Christopher Upp represented U.S. Army Africa during a visit to South Africa's special forces (SASF), a mission conducted jointly with the U.S. Army Ranger Training Brigade. SASF leaders had previously attended a U.S. Army Ranger School graduation and after seeing how Ranger professionalism is combined with technical and tactical proficiency, they invited the U.S. soldiers to South Africa to discuss the development of a course for junior leaders.

While plans are to have SASF troops interact with U.S. Army Africa noncommissioned officers (NCOs) and U.S. Army Rangers to build South African military capacity, it was U.S. soldiers who had a taste of hardcore SASF training. A few weeks after the initial visit, three Army NCOs underwent a grueling three-week survival course in the South African bush, learning valuable lessons on adapting to the environment, maintaining endurance and overcom

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MG William B. Garrett III *is the commanding general of U.S. Army Africa and U.S. Army Southern European Task Force. He is also the senior commander for all U.S. Army forces in Italy. Previous assignments include tours of duty with the 6th Infantry Division, 10th Mountain Division, 25th Infantry Division, 82nd Airborne Division, XVIII Airborne Corps, U.S. Army Combined Arms Center, U.S. Special Operations Command, the Army Staff and the Joint Staff.*



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ing nearly insurmountable challenges—a "tool kit" they carried back to their units.

Later in March, a U.S. Army Africa team headed to Gaborone, Botswana, to share their logistics knowledge with a group of officers from the Botswana Defence Force. Once again, a small team that included a senior NCO and a warrant officer was effective, offering Army ideas on movement control while opening a two-way dialogue on the challenges of carrying out operations in Africa. Building rapport with soldiers in partner nations is an added benefit from such engagements, which can lead to future opportunities to share information on critical Army skills with soldiers in Botswana and elsewhere.

Throughout the year, U.S. Army soldiers serving under Combined Joint Task Force-Horn of Africa have partnered with several African militaries. Soldiers from the 218th Field Artillery Regiment based at Fort Still, Okla., recently wrapped up a 15-month tour conducting military-to-military mentorship programs in Uganda, Ethiopia and other East African countries. Soldiers also lent their military expertise to several missions under the U.S. State Department's Africa contingency operations training and assistance program.

Meanwhile, in the United States, Kenyan military officers visited the U.S. Military Academy at West Point, N.Y. Senior NCOs from Kenya visited U.S. Army NCO training at Fort Benning, Ga., and toured the U.S. Army Sergeants Major Academy at Fort Bliss, Texas.

In April, U.S. Army Africa staff attended the Land Forces Symposium in Nairobi, Kenya. During discussions with senior African military leaders, the primary topic was not simply how the U.S. Army can help now, but rather a dialogue on achieving long-term goals through planning and partnership.

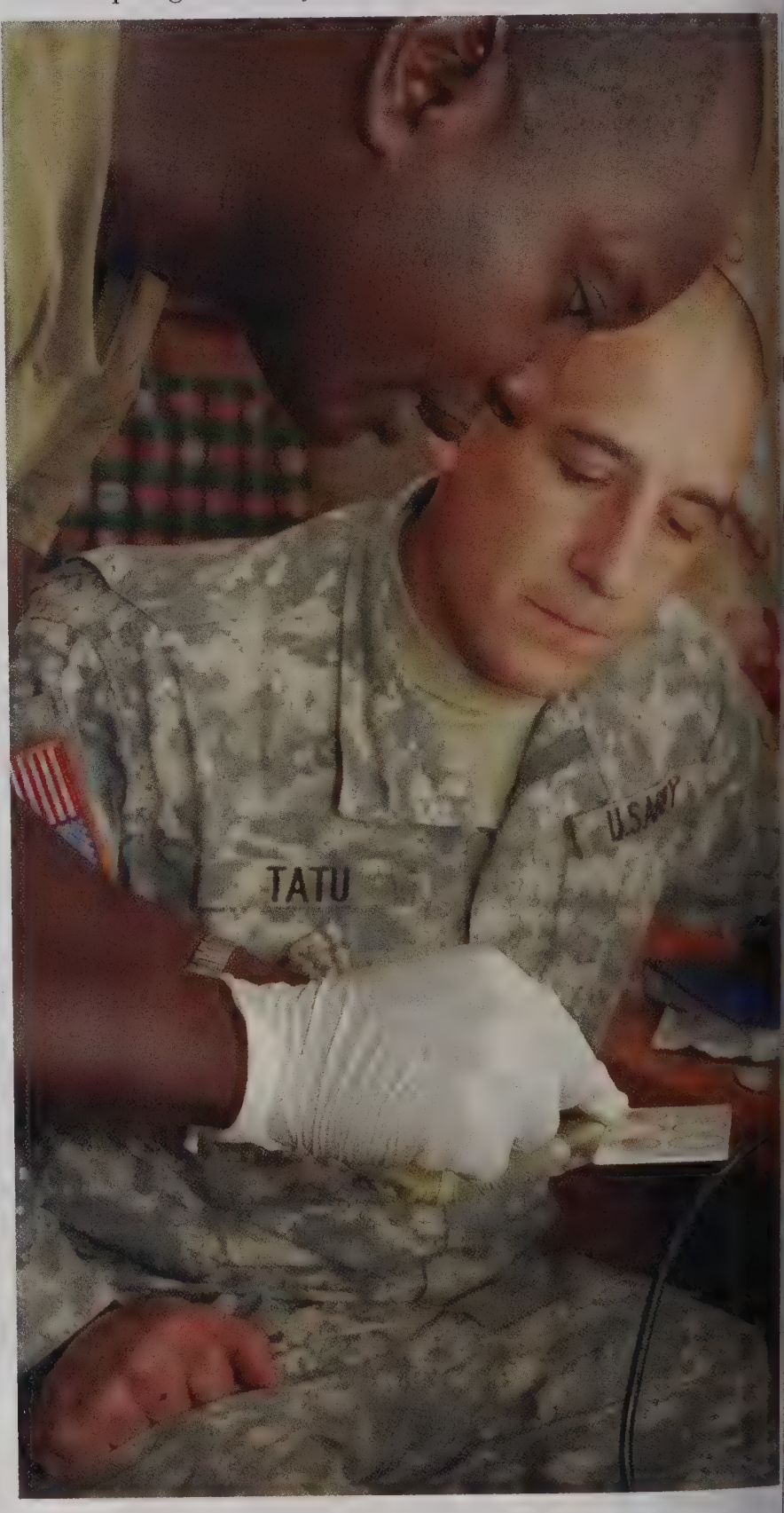
Our bottom line is that U.S. Army Africa efforts must support the policies and plans established by the U.S. embassy in each nation, many of which have U.S. Army officers serving as defense attachés. There are no plans for a large U.S. Army footprint in Africa; the deployment of a battalion or a brigade would happen only in the case of a crisis. Instead, the command deploys small teams of mentors. These teams work traditional "train-the-trainer" missions, building the capacity of partner nations' instructors and enabling them to turn around and teach their own people.

A great example of this took place recently in Rwanda. Two senior U.S. Army Africa NCOs joined a British-led mentorship mission held in Gabiro. The task was the classic infantry "four stack" for clearing buildings. One afternoon, Rwanda Defence Force instructors gathered in the shade of a tree, taking in each step. Then they walked through the tactic. By the next morning, the RDF instructors were teaching their own troops.

As we move forward, mentorship is also happening at senior levels. In Addis Ababa, Ethiopia, four U.S. Army lieutenant colonels are at the core of teaching and leadership within the Ethiopian army war college. African officers and NCOs also attend stateside U.S. Army schools, such as the Command and General Staff College at Fort Leavenworth, Kan.

Success in Africa can only be achieved through partnership with other services within the U.S. military, other governmental agencies and civilian organizations. With no assigned forces, U.S. Army Africa relies on support from commands within the active component, the National Guard and the Army Reserve. In some cases, citizen-soldiers have unique skills and niche capabilities that active component soldiers do not.

This spring, LTG Clyde A. Vaughn, then-director of the



Pvt. Umaru Konneh shows a typhoid-tainted blood sample to SSG Mike Tatu. SSG Tatu, a medic from 2nd Battalion, 18th Field Artillery Regiment, Fort Sill, Okla., was among several NCOs supporting Liberia Security Sector Reform, a U.S. State Department-led mentorship program designed to build Liberia's military capacity.

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MSG Duenas mentors a group of Rwanda Defence Force soldiers during a recent joint British-American program in Gabiro, Rwanda.



Rick Scavetta, U.S. Army Africa

SFC Eddie King, U.S. Army Africa, checks a Liberian soldier's target at Edward Binyah Kesselly Military Barracks, a base outside Monrovia, the capital of Liberia. King is one of several U.S. Army NCOs to take part in the Liberia Security Sector Reform program.

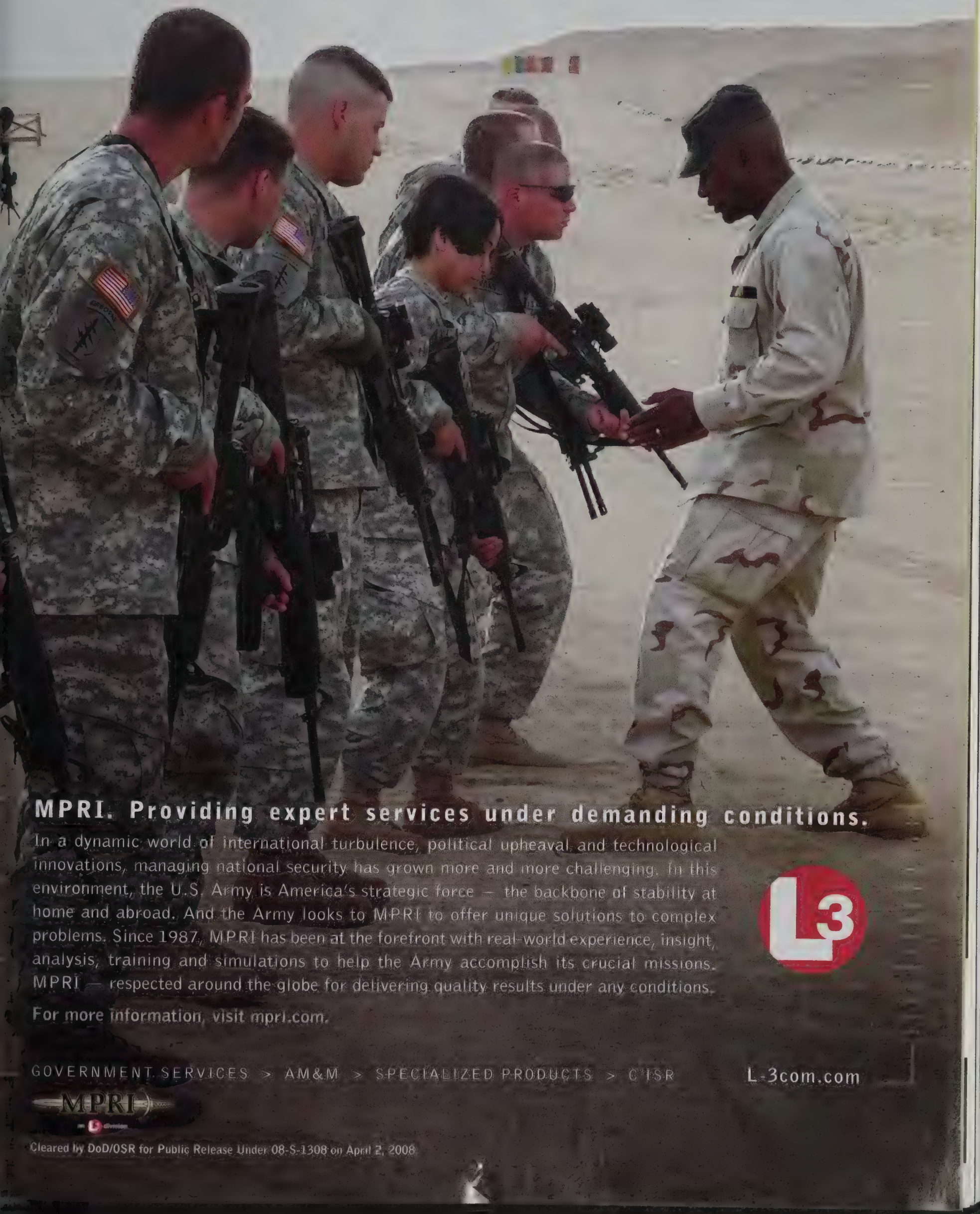
Army National Guard, and LTG Jack C. Stultz Jr., chief of the U.S. Army Reserve and commanding general of the U.S. Army Reserve Command, met with key U.S. Army Africa leaders to discuss how citizen-soldiers' important capabilities—from those of civil affairs personnel and engineers to medics and military police—can be put to good use in Africa.

U.S. Army Africa also uses established efforts, such as the National Guard's state partnership program (SPP), to further U.S. Army interaction with African nations. For more than 15 years, U.S. soldiers have worked with foreign militaries during SPP events. In all, there are seven state partnerships with African nations: California with Nigeria, New York with South Africa, North Carolina with Botswana, Utah with Morocco, Vermont with Senegal, Wyoming with Tunisia and North Dakota with Ghana. Often, U.S. National Guard units fulfill similar roles to the militaries of partner countries in Africa, training to both deploy in support of national missions and respond to local emergencies.

In October, U.S. Army Africa will lead an exercise in Uganda based on a disaster scenario that warrants immediate crisis response. It will validate what we've learned, test our abilities to operate safely and successfully on the continent, and mark places for improvement. Most of all, it will bring together U.S. soldiers with African troops from five partner nations, an interoperability challenge that will allow U.S. Army Africa to deepen our understanding of their abilities and map future mentoring missions to build African military capacity.

U.S. Army Africa is America's premier Army team, dedicated to achieving positive change in Africa. Our mission in Africa will continue to be both complex and novel as situations change. The rewards will be high, as we have a chance to forestall crises rather than merely respond. Together, we will make a positive difference—for our nation and for the people of Africa. ★

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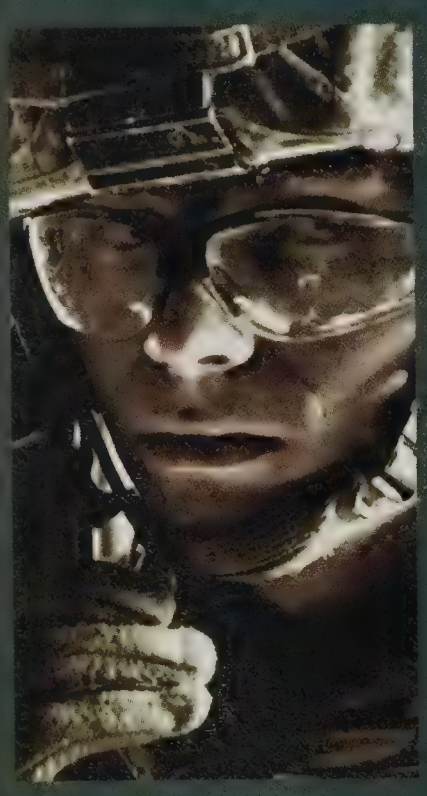
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Advisor Training Shifts to Fort Polk
Army Establishes Enduring Mission

By Dennis Steele
Senior Staff Writer

The mission of preparing advisors and training teams for the wars in Iraq and Afghanistan has moved from Fort Riley, Kan., to Fort Polk, La., building a foundation to advance advisory and assistance training and establishing the training capability to perpetuate those skills beyond current conflicts and reinforce lessons that have been relearned.

On September 1, the recently constituted 162nd Infantry Brigade at Fort Polk was scheduled to take over the advisor training mission that had been performed at Fort Riley by 1st Infantry Division units since 2006. BG James C. Yarbrough, commander of the Joint Readiness Training Center (JRTC) and Fort Polk, said that the Army has recognized that the capability to train combat advisors in security assistance roles is an enduring mission and that the Army intends not to "let the good functions and training and art and science of this task atrophy and die out like we did after Vietnam—the last time we made a concerted effort to train combat advisors. When we disestablished that program, it went dormant for probably 30 years. It is a hard task with much finesse, and it is correct to take the stance that we need to keep it alive as an enduring center of excellence."



With the Army's advisory and assistance training mission's move to Fort Polk, La., the lineage designation as the 162nd Infantry Brigade has been given to the newly established unit that will carry out that mission, with corresponding shoulder sleeve insignia. Divided into two fields by a lightning bolt (symbolizing swiftness, power and the impact that advisory teams have), the upper left field is dark blue, signifying a traditional association with the Infantry. The red Cross of Lorraine denotes the brigade's World War I service in the Ardennes, and the palm frond represents the brigade's World War II campaign credit for the Philippines and Western Pacific campaigns. The lower right background is black (signifying consistency and honoring the fallen) with circles and points illustrating a compass rose, which symbolizes readiness and represents the brigade's ability to provide advisory and assistance teams worldwide. The red and yellow colors were taken from the Military Assistance Command, Vietnam shoulder patch, displaying a lineage to that organization.

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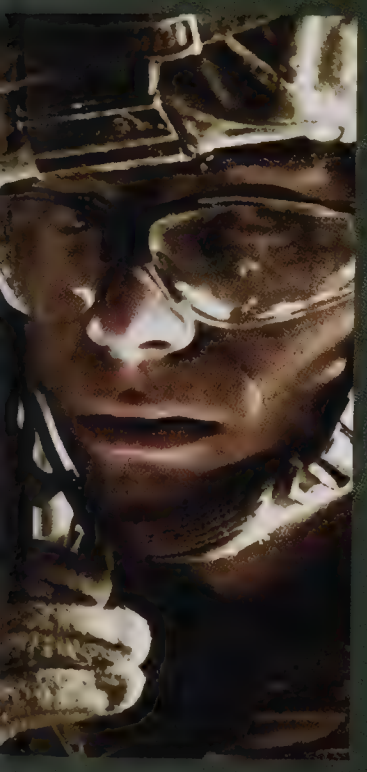
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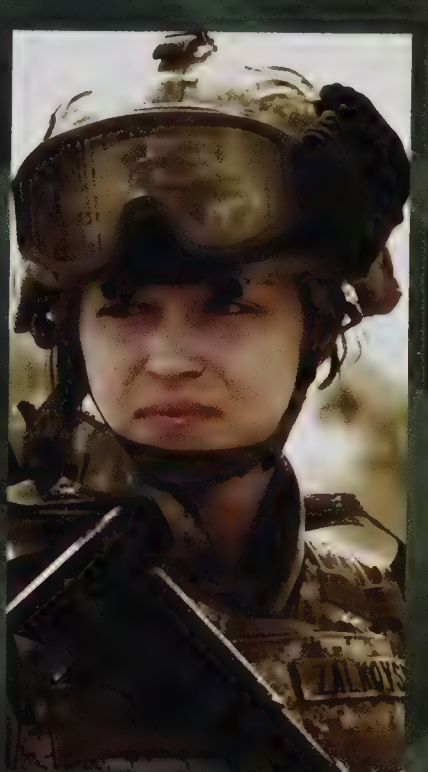
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The Renaissance Washington, D.C. Hotel is the meeting's headquarters hotel. There will be other hotels providing additional rooms within walking distance and with a wide variety of rates and room selections. Registration information for members and additional housing information is available on the Association's web site at www.ausa.org.

Preview of Events

25th Annual Army Ten-Miler

LEAD SPONSORS – AUSA AND KBR

The Army Ten-Miler will be held on Sunday, 4 Oct., 0800 at the Pentagon.

This year the Army Ten-Miler – A Tradition of Excellence – is celebrating its 25th anniversary as the Army's premier athletic event. Hosted by the United States Army Military District of Washington, the Army Ten-Miler with a 30,000 runner cap continues to be one of the best races in America. Thousands of military and civilian runners from the United States, Korea, Canada, Panama, Mexico, Romania, Germany, Finland, Guam, Ireland, the Netherlands, Norway, Brazil, the Philippines and Sweden are expected to participate.

Proceeds from the race will go to the Army's Morale, Welfare and Recreation Program. This program supports Soldiers and their families.

SPONSORS

- Major Sponsors: GEICO, Health Net Federal Services, PricewaterhouseCoopers, New Balance, SAIC, Navy Federal Credit Union, DRS Technologies and Adobe.
- Supporting Sponsors: ASI Photo, TANDBERG and G&G Outfitters, INC.

For more information, visit www.armytenmiler.com, call the Army Ten-Miler office at 202-685-3361 (DSN: 325) or e-mail armytenmiler@fmmc.army.mil.

2009 AUSA Annual Meeting Opening Ceremon

Monday, 5 Oct., 0930–1115. The opening ceremony, featurin The United States Army Band, "Pershing's Own," and the 3rd United States Infantry (The Old Guard), will be a patriotic pageant with the presentation of colors and an inspiring, dramatic multimedia presentation.

Corporate Member Luncheon

Monday, 5 Oct., 1230–1430. This luncheon honors the Corpor Members and their many contributions to the chapters' progra to support Soldiers and families. Corporate members, affiliate chapters and invited guests will hear GEN Ann E. Dunwood Commanding General, United States Army Materiel Comma The luncheon will be held at the Renaissance Hotel in Washington, D.C. Tickets are required (no charge) and are available through local AUSA chapters. Seating is limited.

Preview of Events

ROTC Activities

Monday, 5 Oct., 1230–1430. A luncheon for ROTC cadets, ROTC cadre and invited guests will be held at the Renaissance Hotel in Washington, D.C. The guest speaker will be GEN Carter F. Ham, Commanding General, United States Army Europe and Seventh Army. Advance tickets (no charge) are required and are available from AUSA Regional Activities, P.O. Box 101560, Arlington, VA 22210-0860.

Army Pre-Retirement and Retiree Events

Monday, 5 Oct., 1400–1600. A seminar will be held to update retirees on the Retirement Services, Retired Pay and the VA National Cemeteries. On Wednesday, 7 Oct., 0900–1100, the Department of the Army Retirement Services Office will conduct a presentation for Soldiers approaching retirement. A briefing will also be offered on the Survivor Benefit Plan (SBP).

President's Reception

Monday, 5 Oct., 1830–2015 (ticket required). The President's Reception honoring the Secretary of the Army, the Chief of Staff, United States Army, and the Sergeant Major of the Army affords everyone a chance to meet the Army leadership, socialize with colleagues from the worldwide Army community and see old friends. Hors d'oeuvres and beverages will be served.

Dwight David Eisenhower Reception

Tuesday, 6 Oct., 1130–1215. A cocktail reception (no ticket required) will be held in Exhibit Halls A, B and C of the Walter E. Washington Convention Center, preceding the luncheon. Attendance at the luncheon is not required.

Dwight David Eisenhower Luncheon

Tuesday, 6 Oct., 1230 (ticket required). GEN George W. Casey, Jr., Chief of Staff, United States Army, is the guest speaker. The luncheon will be held in the Walter E. Washington Convention Center Ballroom.

Department of the Army Civilian Professional Development Seminar

Wednesday, 7 Oct., 0930–1130. "New Times - Emerging Roles for Army Civilians (In-sourcing and Expeditionary Workforce)" is the theme of this seminar. Seminar panelists will discuss the current challenges and issues facing government leaders as they plan for the civilian human resource requirements of the future. There will be a question-and-answer period following the panel's presentations There is no charge for this professional development event, held at the Renaissance Hotel in Washington, D.C. Government employees are welcome.

Department of the Army Civilian Luncheon

Wednesday, 7 Oct., 1200–1400 (ticket required). This luncheon will honor government civilians. It will be held at the Renaissance Hotel in Washington, D.C. The guest speaker is GEN William E. Ward, Commander, United States Africa Command.

Sustaining Member Reception and Luncheon

Wednesday, 7 Oct., reception beginning at 1130. This luncheon recognizes Sustaining Members for their support of AUSA and the United States Army. The HON Robert M. Gates, Secretary of Defense, is the speaker. In addition, the John W. Dixon Award will be presented to a distinguished industry leader, who has made considerable contributions to America's defense. This event is by invitation only for Sustaining Members and guests.

George Catlett Marshall Memorial Reception and Dinner

Wednesday, 7 Oct., 1800–1930 (tickets required). Refreshments will be served in Exhibit Halls A, B and C of the Walter E. Washington Convention Center. Following the reception at 2000, the 2009 George Catlett Marshall Memorial Dinner is an impressive climax to the meeting's events. Kenneth Fisher, Chairman and CEO, The Fisher House Foundation, is this year's Marshall Medal recipient. The United States Army Band, "Pershing's Own," will provide entertainment. The formal dinner will be held in the Walter E. Washington Convention Center Ballroom.

Events Honoring Outstanding Soldiers

Monday, 5 Oct., 1230–1430. The Sergeant Major of the Army Awards Luncheon for command sergeants major, general officers, outstanding noncommissioned officers and Soldiers. Requires advance tickets (no charge). Awards will be presented to the United States Army Soldier and Noncommissioned Officer of the Year by Sergeant Major of the Army Kenneth O. Preston.

Monday, 5 Oct., 1500-1530. Year of the NCO Muster. AUSA will host a reception with soft drinks and snacks to be held in the Exhibit Hall to celebrate the Strength of the Army, the Noncommissioned Officer.

Tuesday, 6 Oct., 0700-0950. All noncommissioned officers, SFC and above, will meet with Sergeant Major of the Army Kenneth O. Preston.

At 1430 hours, the Sergeant Major of the Army will meet with Soldiers, SSG and below. NCOs in this category are encouraged to attend this event.

Wednesday, 7 Oct. Outstanding Soldiers will tour Arlington National Cemetery and Washington, D.C. The buses depart at 0930 from the L Street entrance of the Walter E. Washington Convention Center. For information, contact AUSA NCO & Soldier Programs, 2425 Wilson Blvd., Arlington, VA 22201-3326, or call (800) 336-4570, ext. 690.

AUSA Noncommissioned Officers Professional Development Forum

Tuesday, 6 Oct., 1000-1200, there will be a Noncommissioned Officers Professional Development Forum. Topics include:

- NCOES-The Way Ahead
- NCO Transformation
- Army Correspondence Course Program
- Army Career Tracker Simulations
- College of the American Soldier
- Advanced Individual Training Platoon Sergeant
- Future Combat System/Future Force Integration Directorate

Updates will also be presented by Army Accessions Command, the NCO Journal and the NCO Museum.

Speakers: CSM David Bruner
CSM Raymond Chandler
CSM (R) John Sparks
CSM Dennis King
CSM Patrick Laidlaw
Jeffrey Colimon

A question-and-answer session will close out the presentation. This event is open to all noncommissioned officers attending the Annual Meeting.

Institute of Land Warfare Publications

ILW publications will be on display and available during exhibit hours at the AUSA Pavilion, Booth 407 in Exhibit Hall A. Educational materials published by ILW are provided free of charge.

ILW Contemporary Military Forums

The Institute of Land Warfare will host a series of Contemporary Military Forums on topics of current interest to Army professionals and AUSA members. All ILW forums will take place in the Convention Center. Check your Annual Meeting program for details. All Annual Meeting attendees are welcome.

ILW Paper Presentations

Wednesday, 7 Oct., 0900. The Institute of Land Warfare will host presentations and discussions of research papers selected by its editorial board for publication. Papers on subjects of national security interest will be presented by the authors. All Annual Meeting attendees are welcome.

AUSA Book Program Presentation

AUSA, in cooperation with the U.S. Naval Institute Press, Praeger Security International and University of Kentucky Press, has sponsored more than 10 books in 2009 as part of its book program. Authors will be on hand to speak about their books during the authors' forum starting at 1300 on Monday, 5 Oct. and will be available for book signing throughout the meeting at the AUSA Pavilion, Booth 407 in Exhibit Hall A. All AUSA books will be available for purchase (discounted for AUSA members by up to one-third). Please go to www.ausa.org for an update on authors who will be signing.

AUSA Military Family Forum I

"Army Families: The Strength Behind the Soldier"

Monday, 5 Oct., 1400–1630. Forum I begins with honoring the AUSA Newell Rubbermaid Volunteer Family of the Year and is followed by GEN George W. Casey, Jr., Chief of Staff, United States Army and Mrs. Sheila Casey (Invited). Ms. Kathleen Marin from the Office of the Assistant Chief of Staff for Installation Management (ACSIM) will report findings and

formation gathered during Town Hall meetings with Family eadiness Leaders (FRGs) at installations across the Army.

ıe Assistant Secretary of the Army for Manpower d Reserve Affairs (ASA (M&RA)) has chartered the eographically Dispersed Task Force (GDTF) to best meet milies' needs. Ms. Susan Johnson, Office of the Assistant cretary of the Army for Manpower and Reserve Affairs (ASA I&RA)), will present on "Support to Geographically Dispersed ldiers and Family Members."

question-and-answer session will follow each presentation. AUSA Annual Meeting attendees and family members are lcome. Seating is limited and RSVPs are recommended. ease register by 25 Sept. on the AUSA Family Programs' b site at www.ausa.org/family and click on the "registra- n" link in the right-hand column.

JSA Military Family Forum II

my Families: Thriving in the Midst of Challenge"

esday, 6 Oct., 0830–1100. Forum II is scheduled to open h GEN Peter W. Chiarelli, Vice Chief of Staff, United States ny and Mrs. Beth Chiarelli (Invited). It will include presenta- ns on the Army Soldier Fitness Campaign Plan as well as mprehensive Soldier Fitness, which focuses on ensuring re is balance between Army requirements, Soldiers, and ily life, to create a more resilient force. During this time of eated deployments, Soldiers can come home changed. um II addresses preparing Soldiers and families to better ust to those changes. There is also a presentation on the sitioning of care if a Soldier returns home severely wounded. Department of Veterans Affairs (VA) will also provide infor- tion on the Post-9/11 GI Bill. Forum II will conclude with nklinCovey's "POWER" Pilot Program (Providing Outreach ile Enhancing Readiness). This program's objective is to ist caregivers and service providers by helping them ster the tools for achieving a sustainable professional lity of life, or PQL. PQL is a term used by FranklinCovey lescribe the positive physical, mental, social/emotional, spiritual experiences and conditions one should be experi- ing in and through their volunteerism and professionalism. purpose of the course is to explore the ways caregivers rejuvenate themselves through self-care in order to unite and lead others.

uestion-and-answer session will follow each presentation. AUSA Annual Meeting attendees and family members welcome. Seating is limited, RSVPs are recommended. ase register by 25 Sept. on the AUSA Family Programs site at www.ausa.org/family and click on the "registration" in the right-hand column.

AUSA Military Family Forum III

"Army Families: Forging a Stronger Future"

Wednesday, 7 Oct., from 0930–1200. Deployments and high stress levels affect individuals differently. Forum III is focused on the effects of conflict on individual members of the Army Family. LTG Jack C. Stultz, Jr., Chief, Army Reserve/ Commanding General, United States Army Reserve and Mrs. Lauralyn Stultz (Invited) will open the session. This Forum also includes presentations on the Military Child and Adolescent Center of Excellence, an initiative by the Madigan Army Medical Center. Other presentations include the effects of deployment on children and teens who have mothers deployed, and how to support deployed fathers. Both of these presentations focus on helping families maintain their connection during and after a deployment. Presentations will also be made by other non-profit organizations that make contributions to Army family programs.

A question-and-answer session will follow each presentation. All AUSA Annual Meeting attendees and family members are welcome. Seating is limited, please register by 25 Sept. on the AUSA Family Programs web site at www.ausa.org/family and click on the "registration" link in the right-hand column.

Army National Guard and Army Reserve Events

Saturday, 3 Oct., 1800–2130. Senior leaders will be invited to participate in a reception and dinner. The Monday breakfast, 5 Oct., 0730–0900, will have a limited number of tickets available for purchase. The speaker is Kenneth O. Preston, Sergeant Major of the Army. On Tuesday, 6 Oct., 1100–1200, MG Raymond W. Carpenter, Acting Director, Army National Guard, will host a panel discussion on "Agri-Business Development Teams in Afghanistan" and from 1430-1530, LTG Jack C. Stultz, Jr., Chief, Army Reserve/Commanding General, United States Army Reserve Command, will speak on "The Army Reserve - A Positive Investment for America."

Industry and Military Exhibits

Exhibit Halls A, B and C in the Walter E. Washington Convention Center will feature over 500 exhibits. The exhibit hall schedule for the 2009 AUSA Annual Meeting is:

- Monday, 5 Oct., 0900–1700
- Tuesday, 6 Oct., 0900–1700
- Wednesday, 7 Oct., 0900–1700

2009 Annual Meeting Exhibitors

(as of 5 August 2009)

101st Airborne Division
1st Infantry Division
20th Support Command (CBRNE)
2nd Infantry Division
8th U.S. Army
3M Company

A

AAR Mobility Systems
Accurate Energetic Systems, LLC
Accuride Corporation
Actus Lend Lease
ADS, Inc.
Advanced Interactive Systems
Aearo Company
AECOM
Aerojet
Aggreko
Agilent Technologies
Agility Defense & Government Services
Airborne Systems Ltd
Alaska Structures
Alcoa Defense
Allison Transmission Inc.
Altec Industries
AM General Corporation
American Defense Systems, Inc.
Ametek Aerospace & Defense
Amphenol Fiber Systems International
AMTANK Armor
ArcelorMittal - Industeel USA LLC
Armada Int'l Magazine
ArmorWorks
Army Asymmetric Warfare Office
Army & Air Force Mutual Aid Association
Army Brigade Combat Team Modernization
Army Emergency Management
Army Emergency Relief (AER)
Army Enterprise Task Force
Army Family Programs
Army Heritage and Education Center
Army HRsolutions

Army Installations Pavilion
- Actus Lend Lease
- Army Emergency Management
- Army Fisher House
- Defense Energy Support Center
- Deputy Assistant Secretary of the Army for Energy & Partnerships
- Deputy Assistant Secretary of the Army for Environment, Safety & Occupational Health
- Fort Bragg/Pope BRAC RTF
- National Defense Center for Energy & Environment
- Picerne Military Housing
- The Ranger Group
- Tremco Incorporated
- U.S. Army Center for Health Promotion & Preventive Medicine
- U.S. Army Combat Readiness/ Safety Center

Army Management Staff College
Army National Guard
Army Publishing Directorate
Army Reserve
ARMY Times Publishing
Army Women's Foundation
Arotech Corp.
ArvinMeritor, Inc.
Asymmetric Warfare Group (AWG)
ATI Defense
ATK
Atlantic Inertial Systems
ATTRS – Army G-1

AUSA Family Programs Pavilion
- American Red Cross
- Army Fisher Houses
- Army G-1, Human Resources Policy Directorate
- Army Spouse Employment Partnership (FMWRC)
- Brats Without Borders
- Defense Commissary Agency
- FranklinCovey
- Military Child Education Coalition
- Military Life.com
- Military One Source
- Operation Homefront
- Operation Life Transformed
- Real Warriors Campaign
- SFSB (Battlemind Section)
- The Military Family Network
- USA Cares

AUSA Pavilion
- A.V.E.R. Associates
- AGIA
- Army Times Publishing Company, Defense Media Group
- Army 10-Miler
- AUSA Customized Gifts
- Choice Hotels International
- GEICO Auto Insurance
- Grantham University
- Metro Visions
- Naval Institute Press
- Praeger Security International
- The University of Kentucky Press

AV, Inc.
Aviation Week
AxleTech International

B

B.E. Meyers & Co. Inc.
BAE SYSTEMS
Ball Aerospace & Technologies Corp.
Barco Federal Systems
Barrett
BATES Uniform Footwear
Battelle
BBN Technologies
BearingPoint
Bell Helicopter Textron
Benchmade Knife Company
Blackhawk Products Group
BOEING
BOSE Corporation
Bren-Tronics

C

C.E. Niehoff & CO / Goodman Ball Inc.
C-27 J Spartan JCA Team
CACI
CALIBRE
Camber Corporation
CamelBak
Canada: Partners in Defense
CATERPILLAR INC.
CCO Creative Consulting GmbH
CERADYNE ARMOR SYSTEMS
CH2M HILL
Charleston Marine Containers, Inc.
Clean Waste
COBHAM
COGES Eurosatory
COLSA Corporation
Colt Defense
COMBINED SYSTEMS, Inc.
Comtech Mobile Datacom Corp.
Concurrent Technology Corp.
CoorsTek
Cove Shoe Company
CPU Technology
Crane
Crimson Trace
Cummins Inc.
Curtiss-Wright Controls

D

D&G Machine Products
Daimler Trucks North America LLC
Dana Corporation
Danalco, Inc.
Danner
Day & Zimmermann, Inc.
Defence Materiel Organisation (DMO)
Defense Daily/Access Intelligence, LLC
Defense News
DefenseWeb Technologies, Inc.
Defenshield
Deschamps Mat Systems, Inc.
Dewey Electronics Corp.
Diehl Defence Holding GmbH
Dillon Aero
DMA
DRASH (DHS Systems LLC)
DRS Technologies, Inc.
DSM Dyneema LLC
DuPont Company
DynCorp International
Dynetics

E

EADS North America
EAGLE INDUSTRIES UNLIMITED, INC.
Eagle Support Services Corporation
ECS COMPOSITES, INC.
Elbit Systems of America
ELCAN Optical Technologies
Energizer
Energy Technologies, Inc.
EnerSys
Ensign - Bickford Aerospace & Defense Company
ESS, Inc.
Esterline Defense Group

F

FAIRCOUNT
FALCK SCHMIDT Defence Systems
Finmeccanica Group Services
Firetrace Aerospace
First Army
First Choice Armor & Equipment
FLIR Government Systems, Inc.
FLUOR
FNH-USA
Force Protection, Inc.
Fraser-Volpe LLC

French Pavilion
- EUROSATORY
- EURENCO (GROUPE SNPE)
- GICAT
- HGH INFRARED SYSTEMS
- SOFRADIR

G

GE Aviation
General Atomics
General Dynamics - OTS
General Dynamics Advanced Information Systems
General Dynamics C4 Systems
General Dynamics Combat Systems
General Dynamics Information Systems & Technology
General Kinetics Engineering Corp.
Gentex Corporation
GERBER LEGENDARY BLADES

German Pavilion
- Aleris Aluminum Bonn GmbH
- Carl Zeiss Optronics GmbH
- CCO Creative Consulting GmbH
- CeramTec - ETEC GmbH
- Ecolog AG
- ESW GmbH
- German Army/Heeresamt III 1
- Haix Schuhe/Haix North America, Inc
- Hoesch Schwerter Profile GmbH
- Kärcher Futuretech GmbH
- MAN Nutzfahrzeuge AG
- ROTZLER GmbH & Co. KG
- Schmidt & Bender GmbH
- SFC Smart Fuel Cell AG
- WellCom GmbH/Autoflug GmbH

Global Electric Motorcars
Global Seating Systems
GLOCK, Inc.
GMA Cover Corp.
Goodrich Corp.
Goodyear Tire & Rubber Co.
Gyrocam Systems

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ellenic Defense Systems SA
gh Impact Technology, LLC
ome Depot
oneywell
ughes
UMANA MILITARY HEALTHCARE
SERVICES INC.
unter Defense Technologies
UTCHINSON INDUSTRIES, INC.

P Worldwide Services
STEK
M
F International
evac Photonics, Inc.
obot Corporation
ael Aerospace Industries
ael Military Industries, Ltd. / IMI
Services US

V Drawn Metals

. Darling Corporation
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B, Inc.
ep Government & Military Sales
hn Deere Company

R
HiLites
arfott Corporation
DE DUAL SPECTRUM
per Tool
NGSBERG DEFENCE & AEROSPACE
TRA
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H INDUSTRIES, INC.
ikpoint

Communications
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therman Tool Group, Inc.
trox
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sterCraft
Lane Advanced Technologies
Q
ggitt Defense Systems
ridian Medical Technologies, Inc.
M Brakes

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Michelin North America
Microvision
Mikal Group
Military Systems Group
MILKOR USA, INC.
Milliken & Company
Miltec, A Ducommun Company.
Missile Defense Agency
MPRI
MSA
MTU Detroit Diesel

N

NACRE US, Inc.
NAMMO
Nasatka Barrier
National Industries for the Blind
National Museum of the United States Army
NAVISTAR Defense
Northrop Grumman Corporation
Northwest Territorial Mint
Norwich University Army ROTC
NOVA Electric

O

OAKLEY
Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology
OLIN CORPORATION - WINCHESTER AMMUNITION
O'Neil & Associates, Inc.
Ontario Knife Company
ORBIT INSTRUMENTS, A DIVISION OF ORBIT INTERNATIONAL
OSG Armor
Oshkosh Defense
Otis Products Inc.
OTTO

P

Pacific Scientific
Panasonic Computer Solutions Co.
Parker Aerospace
PHANTOM PRODUCTS, INC.
Physical Optics Corporation
Picerne Military Housing
Pioneer Services
PLASAN SASA
Point Blank Solutions
POLARIS INDUSTRIES INC.
Polartec, LLC
Poongsan
Port-A-Cool LLC
PPG Industries, Inc.
Protective Products International
PulseTech Products Corporation

Q

QinetiQ North America
Quantum3D, Inc.

R

RACAL ACOUSTICS LTD.
RAFAEL USA Inc.
Raydon Corporation
Raytheon Company
Real-Time Laboratories LLC
Revision Eyewear Ltd.
Rockwell Collins
ROLLS ROYCE CORPORATION
RUDCHAIN, INC.

S

SAAB AB SWEDEN
SAIC (Science Applications International Corporation)
Sarnoff Corporation
Sawyer Products
Schott North America, Inc.
SECURE RUGGED PORTABLE SYSTEMS
SEILER INSTRUMENT CO.
SEKAI ELECTRONICS INC.
Sensata
Sierra Nevada Corporation
Sig Sauer
Sikorsky
Simpler Consulting LP
Smiths Detection
SOFEX Jordan
SPA-Simrad
Spraycool
Sprung Instant Structures
SRC, Inc.
SRI International
Stanley Vidmar
SupplyCore, Inc.
SureFire

T

TASER International Inc.
Team Wendy LLC
Teijin Aramid USA, Inc.
Teledyne Brown Engineering
Telephonics Corporation
TenCate Advanced Composites, Inc.
Terex Corporation
Textron Systems
Thales
Tremco Incorporated
Trijicon, Inc.
Truck-Lite Co., Inc.
Tyco Electronics

U

U.S. Army Africa Command
U.S. Army Center of Military History
U.S. Army Central (USARCENT)
U.S. Army Chief of Chaplains
U.S. Army Combined Arms Support Command
U.S. Army Corps of Engineers
U.S. Army Environmental Command
U.S. Army Europe & 7th Army
U.S. Army Family and Morale, Welfare, and Recreation Command
U.S. Army G-4
U.S. Army G-8
U.S. Army Human Resources Command
U.S. Army Installation Management Command
U.S. Army Intelligence and Security Command
U.S. Army Manpower & Reserve Affairs
U.S. Army MANPRINT Program
U.S. Army Materiel Command
U.S. Army Medical Command
U.S. Army Medical Research and Materiel Command
U.S. Army North (USARNORTH)
U.S. Army Office of the Chief of Public Affairs / The Army Exhibit
U.S. Army Pacific (USARPAC)
U.S. Army Sergeants Major Academy
U.S. Army Simulation Proponent Division, DCS, G-8
U.S. Army South
U.S. Army Space & Missile Defense Command/Army Forces Strategic Command
U.S. Army Special Operations Command
U.S. Army Test & Evaluation Command
U.S. Army Training and Doctrine Command
U.S. Military Academy at West Point
Ultra Electronics TCS
ULTRALIFE Corp.
Under Armour
UNITECH

United Kingdom Pavilion

AB Connectors Ltd
BCB International Ltd
Bioquell
Chemring Group PLC
DMA/APPSS
Faun MV Ltd (Trackway Division)
GKN Aerospace Ltd
Hesco Military Products Ltd
Instro Precision Ltd
Pearson Engineering Ltd
UKTI Defence and Security Organisation

URS EG&G Division
US Ordnance, Inc.
USAA

V

Vectronix Inc.
ViaSat, Inc.
Virginia Military Institute Army ROTC
VSE Corporation
VT Miltope
VT Systems Inc.

W

W. L. Gore & Associates, Inc.
W.W. Williams
WFEL Limited
Whitney, Bradley & Brown
Wilcox Industries
Wiley X Eyewear
Will-Burt Company

Z

Z Microsystems
Zarges

Program Highlights



GEN Gordon R. Sullivan
United States Army Retired
President, AUSA



Kenneth Fisher
Chairman and CEO
The Fisher House Foundation
Marshall Medal Recipient



HON Robert M. Gates
Secretary of Defense



GEN George W. Casey, Jr.
Chief of Staff
United States Army



GEN Peter W. Chiarelli
Vice Chief of Staff
United States Army

(All events take place in the Walter E. Washington Convention Center unless otherwise noted.)

FRIDAY, 2 OCTOBER

0700 **Resolutions Committee Meeting**
DA Staff Briefing, *AUSA Headquarters*

1100-2000 **Army Ten-Miler Packet Pickup**
D.C. Armory, Washington, D.C

1100-2000 **Army Ten-Miler New Balance EXPO**
D.C. Armory, Washington, D.C

SATURDAY, 3 OCTOBER

0900-1900 **Army Ten-Miler Packet Pickup**
D.C. Armory, Washington, D.C

0900-1900 **Army Ten-Miler New Balance EXPO**
D.C. Armory, Washington, D.C

1800–1900 **Army National Guard/Army Reserve Reception***
Renaissance Hotel, Washington, D.C.

1830–2000 **GEICO Pre-Race Pasta Dinner: "All-You-Can-Eat"**
Remarks:
SMA Kenneth O. Preston
Sergeant Major of the Army
The Sergeants Major of the Army National Guard and the United States Army Reserve
Crystal Gateway Marriott Hotel, Arlington, VA

1900–2130 **Army National Guard/Army Reserve Dinner***
Speaker: GEN Charles C. Campbell
Commanding General, United States Army Forces Command
Renaissance Hotel, Washington, D.C.

SUNDAY, 4 OCTOBER

0800 **Twenty-Fifth Annual Army Ten-Miler**
Lead Sponsors – AUSA and KBR
Race starts at the Pentagon

1800–1900 **Chapter Presidents, Delegates and Presidents Club Reception***
Renaissance Hotel, Washington, D.C.

1900–2200 **Chapter Presidents Dinner***
Host: GEN Gordon R. Sullivan
United States Army Retired, President, AUSA
Speaker: GEN Martin E. Dempsey
Commanding General, United States Army Training and Doctrine Command
Renaissance Hotel, Washington, D.C.

MONDAY, 5 OCTOBER

0730–0900 **Army National Guard/Army Reserve Leadership Breakfast***
Speaker: SMA Kenneth O. Preston
Sergeant Major of the Army

0900–1700 **Exhibits Open: Halls A, B and C**

0930–1115 **Opening Ceremony**
Keynote Speaker: Secretary of the Army

1230–1430 **Corporate Member Luncheon***
Speaker: GEN Ann E. Dunwoody
Commanding General, United States Army Materiel Command
Renaissance Hotel, Washington, D.C.

1230–1430 **ROTC Luncheon***
Speaker: GEN Carter F. Ham
Commanding General, United States Army Europe and Seventh Army
Renaissance Hotel, Washington, D.C.

1230–1430 **Sergeant Major of the Army Awards Luncheon***
(CSMs, GOs, NCOs & Soldiers of the Year)
Speaker: GEN Peter W. Chiarelli
Vice Chief of Staff, United States Army (Invited)

1300–1700 **AUSA Book Program**
(Author presentations)

1300–1500 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

1300–1500 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

*Ticket or invitation required.



GEN William E. Ward
Commander
United States Africa Command



GEN Charles C. Campbell
Commanding General
United States Army Forces Command



GEN David H. Petraeus
Commander
United States Central Command



GEN Carter F. Ham
Commanding General
United States Army
Europe and Seventh Army



GEN Ann E. Dunwoody
Commanding General
United States Army
Materiel Command

1400–1600 **Retiree Seminar**
Presentations:
Army Retirement Services
Retired Pay – DFAS
VA National Cemeteries

1400–1630 **AUSA Military Family Forum I**
"Army Families: The Strength Behind the Soldier"
Speakers: GEN George W. Casey, Jr.
Chief of Staff, United States Army
Mrs. Sheila Casey (Invited)
Kathleen Marin, Office of the Assistant Chief of Staff for Installation Management
Susan Johnson, Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs

1500-1530 **Year of the NCO Muster**
AUSA-hosted break in the Exhibit Hall

1730–1830 **International Military VIP Reception***

1830–2015 **President's Reception***
Honoring:
The Secretary of the Army
The Chief of Staff, United States Army
The Sergeant Major of the Army

TUESDAY, 6 OCTOBER

0700–0950 **Sergeant Major of the Army Conference**
(SFCs and above only)

0800–0900 **International Military VIP and Industry Networking Breakfast***

0800–1100 **Chapter Presidents and Delegates Workshop**

0830–0915 **Congressional Staffers Breakfast***
Speaker: Secretary of the Army

0830–1030 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

0830–1030 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

0830–1100 **AUSA Military Family Forum II**
"Army Families: Thriving In the Midst of Challenge"
Speakers: GEN Peter W. Chiarelli
Vice Chief of Staff, United States Army
Mrs. Beth Chiarelli (Invited)
Gina Klaus, VBA Outreach Coordinator, Office of Policy and Program Management, Veterans Benefit Administration
Jennifer Perez, Acting Chief Consultant for Care Management and Social Work Service, LICSW, Veterans Health Administration
Alfonso R. Batres, Ph.D., MSSW, Chief Readjustment Counseling Officer, Veterans Health Administration
Shawn Moon, General Manager for Government and Education Services, FranklinCovey

0900–1700 **Exhibits Open: Halls A, B and C**

1000–1200 **NCO Professional Development Forum**
NCOES: The Way Ahead
Speaker: CSM David M. Bruner
Command Sergeant Major of TRADOC

1100–1200 **Director, Army National Guard Seminar**
Speaker: MG Raymond W. Carpenter
Acting Director, Army National Guard

1130–1215 **Dwight David Eisenhower Reception**
Exhibit Halls A, B and C

1230 **Dwight David Eisenhower Luncheon***
Speaker: GEN George W. Casey, Jr.
Chief of Staff, United States Army

1430–1530 **Chief, Army Reserve Seminar**
Speaker: LTG Jack C. Stultz, Jr.
Chief, Army Reserve/Commanding General
United States Army Reserve Command

1430–1630 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

1430–1630 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

*Ticket or invitation required.

Program Highlights — continued



GEN Martin E. Dempsey
Commanding General
United States Army Training
and Doctrine Command



SMA Kenneth O. Preston
Sergeant Major of
the Army



LTG Jack C. Stultz, Jr.
Chief, Army Reserve/
Commanding General, United
States Army Reserve Command



MG Raymond W. Carpenter
Acting Director
Army National Guard

1430–1630 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

1430–1600 **Sergeant Major of the Army Conference**
(SSGs and below only)

1600-1730 **GEN David H. Petraeus**
Commander, United States Central Command

WEDNESDAY, 7 OCTOBER

0700–0930 **AUSA Region Breakfast Meetings**

0800–1000 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

0800–1000 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

0900–1100 **Pre-Retirement/Survivor Benefit Plan Briefing**

0900–1100 **ILW Paper Presentations**

0900–1700 **Exhibits Open: Halls A, B and C**

0930–1100 **Outstanding Soldiers Tour of Arlington National Cemetery and Washington, D.C.**

0930–1130 **Department of the Army Civilian Professional Development Seminar**
"New Times-Emerging Roles for Army Civilians (In-sourcing and Expeditionary Workforce)"
Speakers: LTG Frank G. Helmick, Commander, Multi-National Security Transition Command-Iraq/Commander, NATO Training Mission-Iraq
MG William H. McCoy, Jr. (Invited), Deputy, The Inspector General
Marilee Fitzgerald, Principal Deputy, Under Secretary of Defense, Civilian Personnel Policy
John Anderson, Ph.D., Deputy DASA for Force Management, Manpower/Resources Office, Assistant Secretary of the Army (Manpower and Reserve Affairs)
Craig Spisak, Director, United States Army Acquisition Support Center
Amy Parker, Senior Manpower Analyst Requirements, Program and Budget Directorate, Office, Deputy Under Secretary of Defense, (Personnel & Readiness)
Renaissance Hotel, Washington, D.C.

0930–1200 **AUSA Military Family Forum III**
"Army Families: Forging a Stronger Future"
Speakers: LTG Jack C. Stultz, Jr., Chief, Army Reserve/Commanding General, United States Army Reserve Command
COL Kris Peterson, M.D., Military Child and Adolescent Center of Excellence: Madigan Medical Center
Tim Red, Director of Military Family Programming, National Fatherhood Initiative
Mona P. Ternus, Ph.D., RN, CNS, CCRN, Director of Academic Outreach, George Mason University
Mathew G. Wright, JD, CFRE, Director of Foundation and Corporate Relations, Attorney at Scott & White Healthcare
Frank E. Lasch, Sr., Chairman & CEO of Azalea Charities, Inc.

1130–1330 **Sustaining Member Reception and Luncheon***
Speaker: HON Robert M. Gates
Secretary of Defense

1200–1400 **Department of the Army Civilian Luncheon***
Speaker: GEN William E. Ward
Commander, United States Africa Command
Renaissance Hotel, Washington, D.C.

1400–1530 **ILW Contemporary Military Forum**
Topic and Speakers: TBA

1800–1930 **George Catlett Marshall Memorial Reception***
Exhibit Halls A, B and C

2000 **George Catlett Marshall Memorial Dinner***
Recipient: Kenneth Fisher,
Chairman and CEO, The Fisher House Foundation
Walter E. Washington Convention Center Ballroom

(All information as of 5 August, 2009, and subject to change)

*Ticket or invitation required.

AUSA Sustaining Members

(as of 5 August 2009)

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Beta Company
Blackhawk Products Group
Blackwater Worldwide
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Brookwood Companies Incorporated
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Canada: Partners in Defense
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CDW Government, Inc.
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Ceradyne, Inc.
CGSC Foundation, Inc.
CH2M HILL
Chang Industry, Inc.
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Chelton, Inc.
Chevron Energy Solutions
Choctaw Manufacturing Defense Contractors
Chrysler LLC - Jeep Government & Military
Cleanwaste/Phillips Environmental Products, Inc.
CMI Defence
Cobham Defense Electronic Systems
Cobham DES-M/A-COM, Inc.
Coges
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COLSA Corporation
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DRS Technologies, Inc.
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L-1 Identity Solutions
L-3 Communications
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Laser Shot, Inc.
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Wegmann USA, Inc.
WELLCO / Ro-Search, Inc.
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WFEL Limited
Whitney Bradley & Brown, Inc.
Wilcox Industries Corporation
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Annual Meeting Fast Facts

Join More Than 32,500 People!

The Association of the United States Army welcomes all AUSA members, military and civilian employees of the United States armed forces, designated representatives of exhibitor and member companies, invited guests of the Association and others who have an identifiable relationship with the United States Army. Military Family Members are welcome to attend the Annual Meeting. Some events may not be appropriate for children, i.e. social functions.

The personal identity of each registrant must be established by a United States government or United States state-issued photo identification card in order to register. Additionally, an identifiable relationship with the United States Army must be established by documents such as an AUSA membership card, Armed Forces ID card, United States government employee photo ID card or inclusion in an AUSA chapter, corporate or sustaining member company, or exhibiting company roster.

Registration

Registration for the Annual Meeting is free. Visitors with registration badges are admitted at no charge to all program sessions and exhibit areas. For security reasons, badges must be worn at all times. Attendees may register at the East Registration area located in the Walter E. Washington Convention Center beginning at 1300 on Friday, 2 Oct. See the schedule below for specific dates and times.

REGISTRATION DESK HOURS

Exhibitors / Attendees

Friday	2 Oct.	1300 – 1700
Saturday	3 Oct.	0800 – 1700
Sunday	4 Oct.	0800 – 1800
Monday	5 Oct.	0700 – 1900
Tuesday	6 Oct.	0800 – 1700
Wednesday	7 Oct.	0800 – 1800

Ticketed Functions

Only members of AUSA may purchase tickets to social functions in advance. Ticket orders must be received by 21 Sept., and members are encouraged to use the Advanced Individual Registrations forms in the June through September issues of *ARMY* Magazine and *AUSA NEWS* or online at www.ausa.org. Full payment must accompany all orders and their receipt will be confirmed by e-mail. Tickets can be picked up at the AUSA Ticket Pickup desk at the East Registration lobby beginning at 1300 on Friday, 2 Oct. Refunds for cancellations will be made only upon written requests received by 21 Sept. Nonmembers who register for the meeting may purchase tickets at the Sales Booth beginning at 1300, Friday, 2 Oct.

Dress

All events except the President's Reception and the Marshall Reception and Dinner are informal.

Military Dress Code:

- **Guard/Reserve Dinner:** Business attire
- **President's Reception:** Class A uniform
- **Opening Ceremony:** Duty uniform
- **Marshall Reception and Dinner:**
  - Officers: Dress Blues/Mess Dress
  - Soldiers: Dress Blues, Mess Dress, Class A uniform with white shirt and bow tie, civilian black tie or dark business suit.
- **Exhibit Floor and all other events:** Duty uniform
- **Award Recipient:** Class A uniform
- **Speakers:** Business attire, Class A uniform or duty uniform

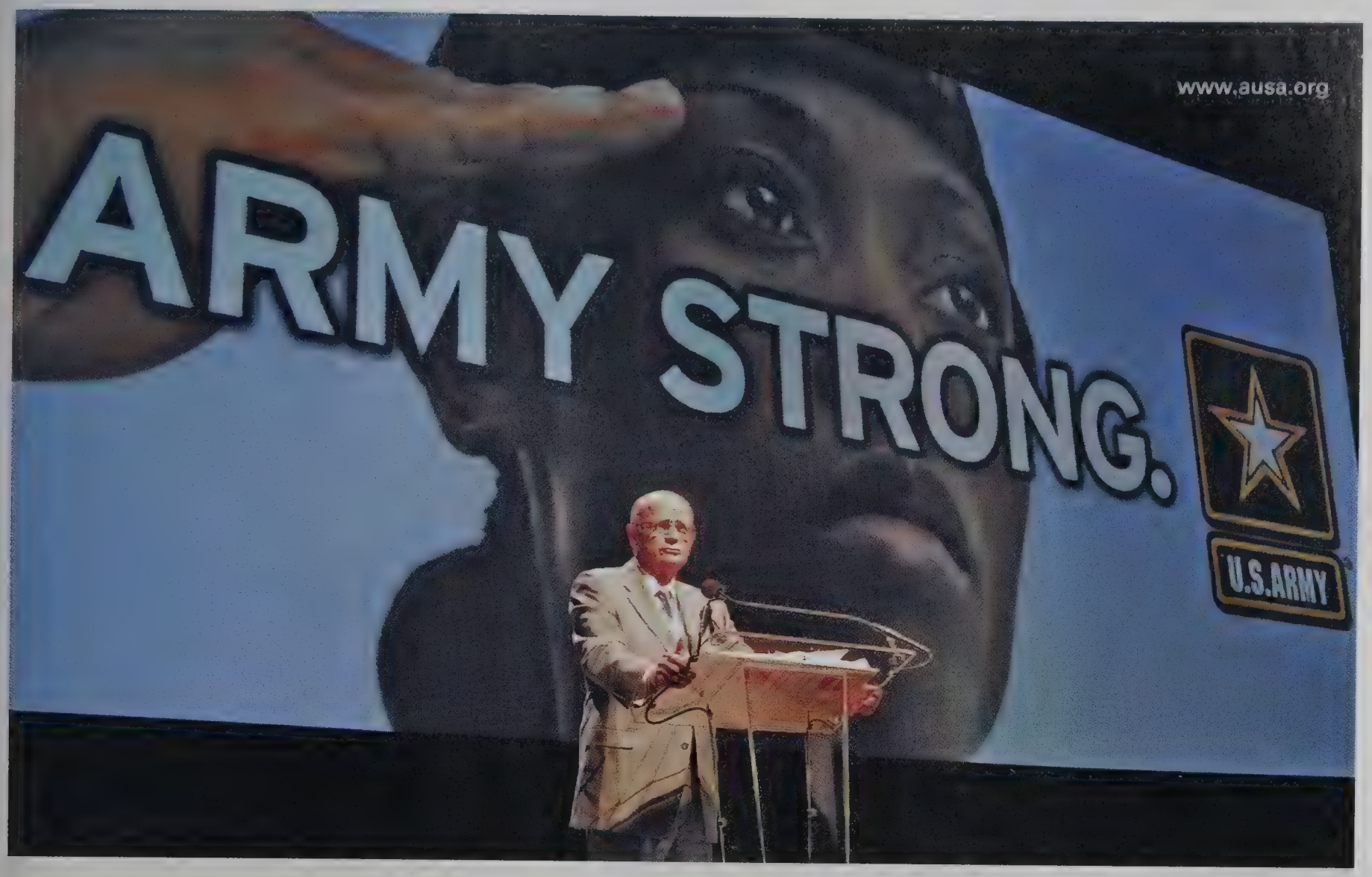
Americans with Disabilities Act (ADA)

Registrants with special needs who participate in our Annual Meeting will be accommodated to the fullest extent possible. If you need special arrangements, please advise us at the time you register.

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Over 550 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has been playing a role in strengthening national security for over 50 years by facilitating partnerships between military decision-makers and industry leaders.

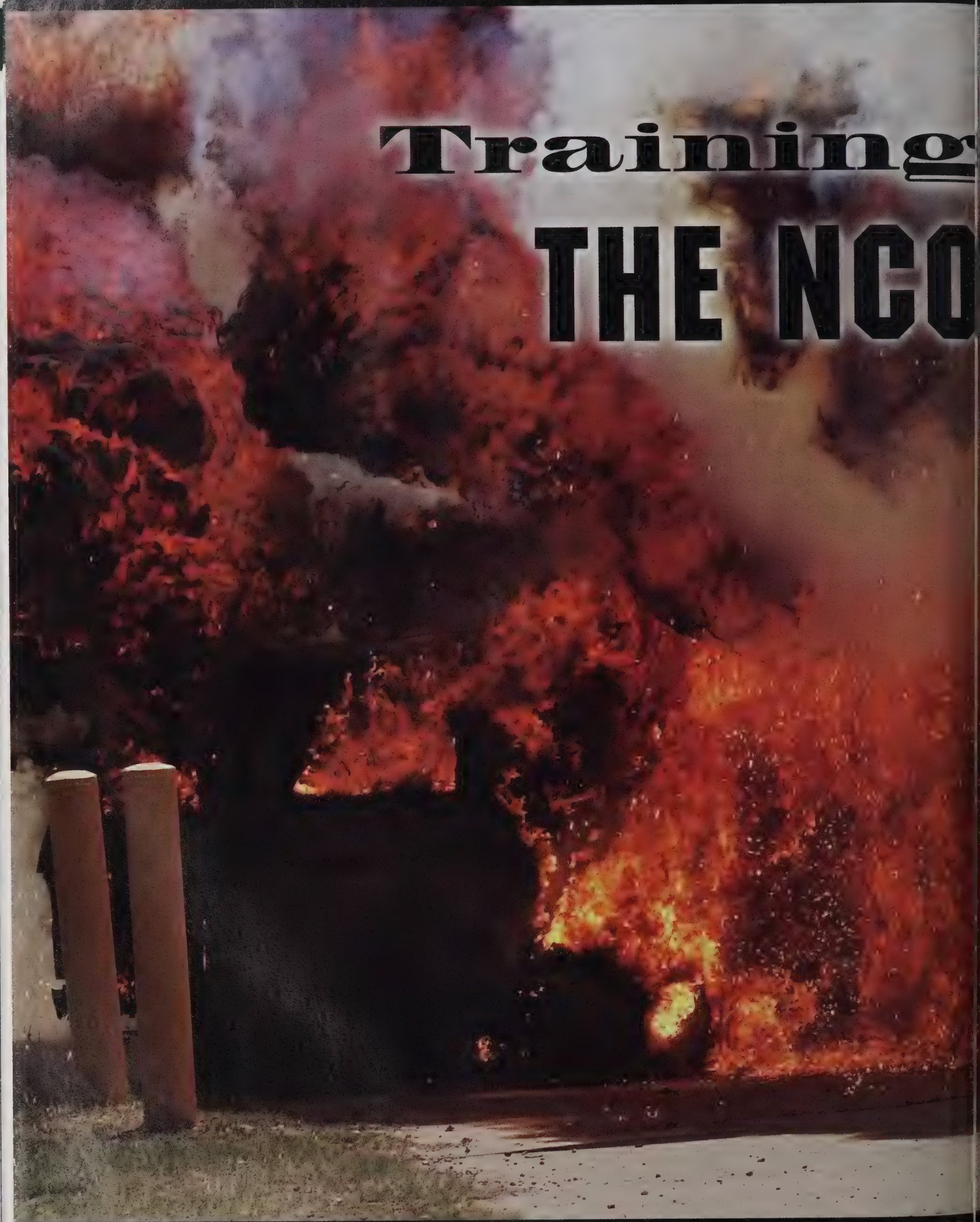
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Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:

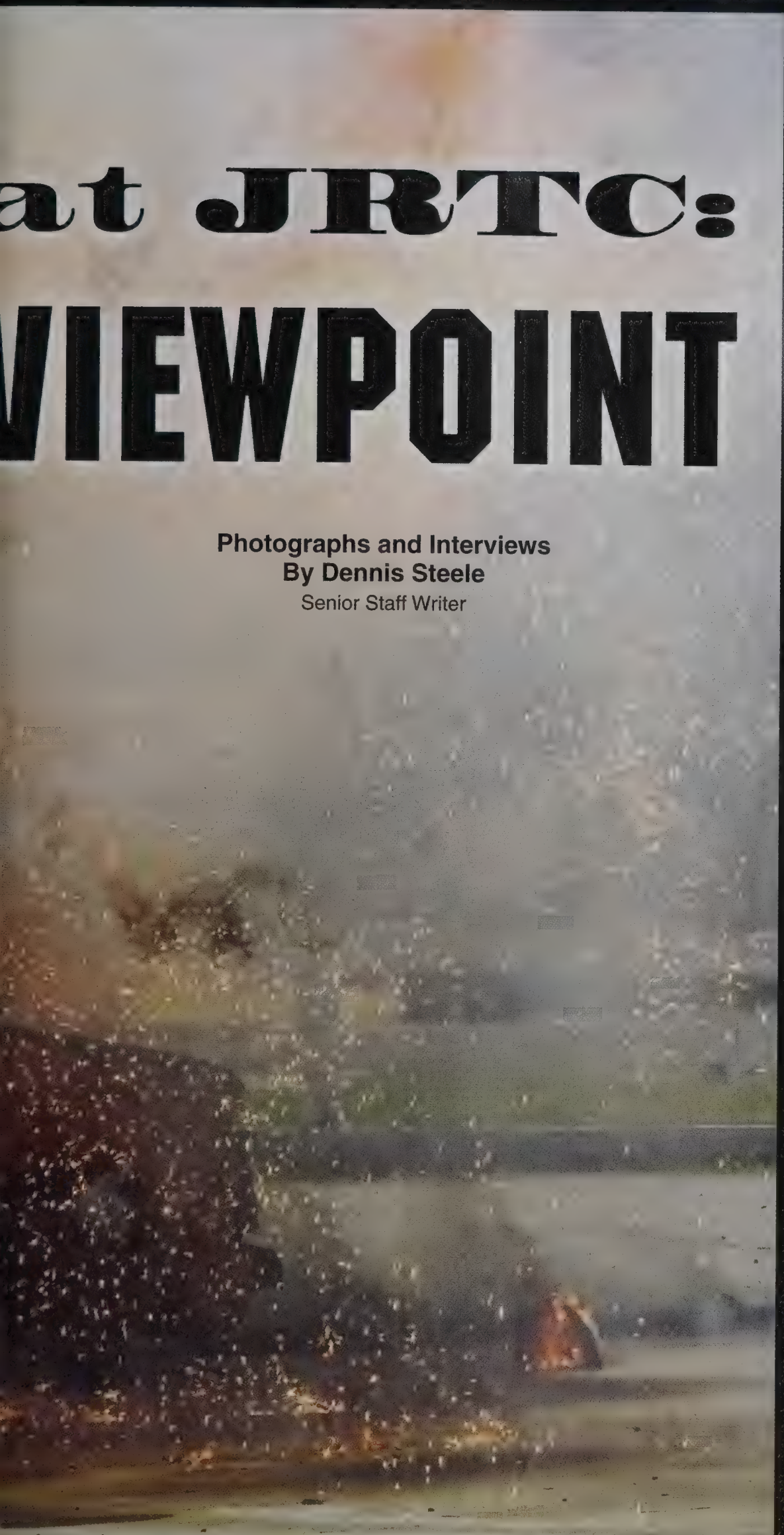
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Training
THE NCO

at JRTC:
VIEWPOINT

Photographs and Interviews
By Dennis Steele
Senior Staff Writer



A fireball erupts from a junked car as an element of the special effects employed by the Joint Readiness Training Center (JRTC), Fort Polk, La., to provide realistic training for Army brigade combat teams (BCTs) preparing for deployment to Iraq or Afghanistan.



Training rotations at the Joint Readiness Training Center (JRTC), Fort Polk, La., prepare brigade combat teams (BCTs) for deployment to Iraq and Afghanistan. JRTC employs a range of technologies and sensory enhancements along with hundreds of cultural role-players and its opposing force, the 1st Battalion (Airborne), 509th Infantry Regiment, to replicate as much as possible the environments and situations that soldiers will face.

Last summer, the 4th Brigade Combat Team (Stryker), 2nd Infantry Division, from Fort Lewis, Wash., came to JRTC for a mission rehearsal exercise before deploying to Iraq—its brigade-level collective training event before combat. The BCT's vehicles and much of its equipment went directly from Fort Polk to the port in Beaumont, Texas, for overseas shipment.

Following are remarks from five sergeants major regarding JRTC and the training from the viewpoints of those who provided the training and those who received it. Boasting approximately 125 years of collective experience, they also talked about being noncommissioned officers in the U.S. Army.



A Stryker vehicle covers soldiers from the 4th BCT, 2nd Infantry Division, as the brigade trains at JRTC.

Remarks by CSM Christopher Greca
Command Sergeant Major, JRTC and Fort Polk, La.

The Joint Readiness Training Center is a diverse installation that is helping our Army win this war.

This is not the JRTC of 10 years ago. The Atlanticans and Cortinians are long gone. I think we won that fight. But as we have made the transition to overseas contingency operations, we have continued to train soldiers for the fight they are going into, based on the situations in which soldiers and leaders will find themselves overseas. A difference between today's JRTC and the JRTC of 10 years ago is how flexible our opposing force is, and how flexible our trainer-mentors [TMs] are in assisting BCTs for the mission sets that they will experience in Afghanistan or Iraq.

Certainly, our soldiers have to be proficient in their core competencies—their battle drills in sector and when dealing with kinetic operations—and they must react to the emerging threats that exist both in Iraq and Afghanistan. JRTC, however, has put a lot of emphasis on combined operations, improving how we put an Iraqi or an Afghan face on our operations. With American soldiers at all levels advising and assisting Coalition partners, we want to ensure that their level of proficiency is increased at the individual and collective organizational levels so that when we hand over security missions to the Iraqi army, for example, we can do it with less friction. JRTC does a tremendous job of being part of that.

The training rotations are tailored. It begins with the



Soldiers from the 4th BCT watch for opposing force activity at a JRTC training village.



Soldiers read a casualty card, indicating the type of wound received, during a JRTC situational training exercise.

planning process, building on a BCT commander's intent and training objectives and what he is looking to achieve. Obviously, we know that a fundamental part will be building the staffs through the CPX [command post exercise], and building coordination between the company intelligence support teams and the battalion or squadron staffs, and the battalion or squadron staffs with the BCT staff. We know that it's critical for them to push and pull information at all levels.

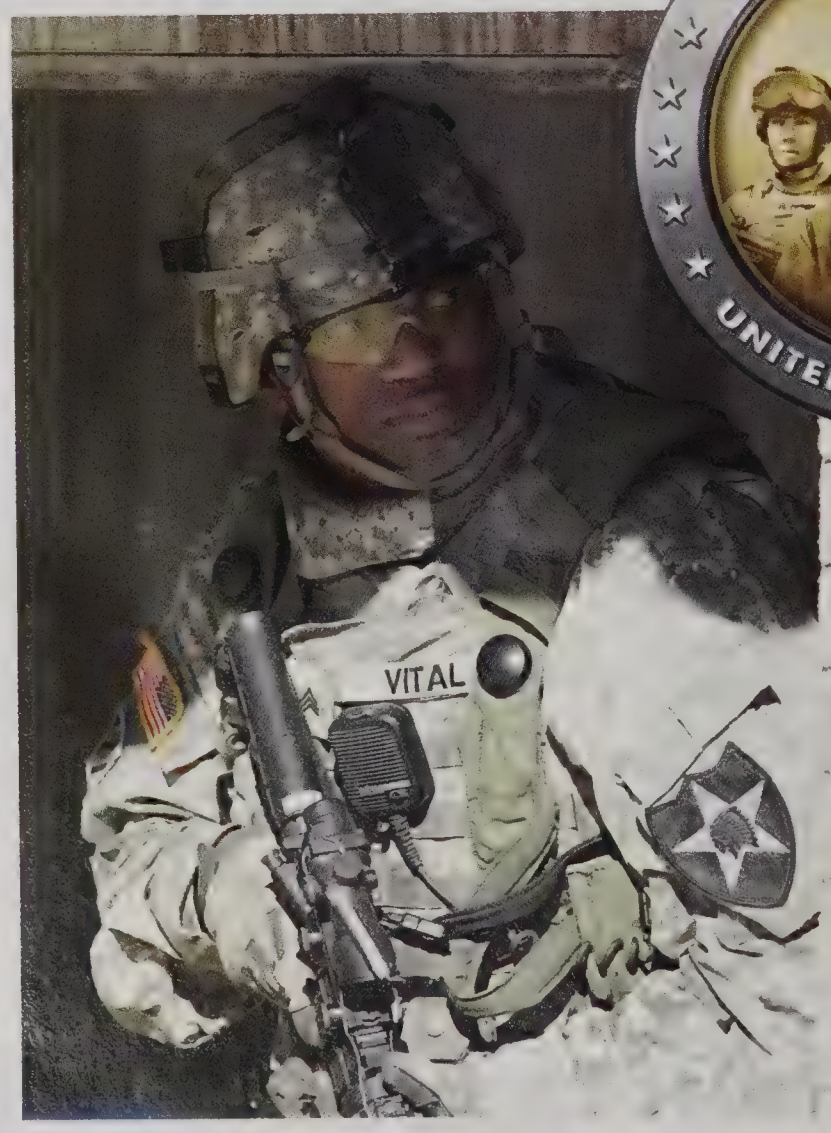
At the individual soldier level, over the course of 17 days, kinetic scenarios are going to be thrown at them that they need to experience here at JRTC. If they face those scenarios here, they will discover what they didn't do right and what SOP [standard operating procedure] or TTP [tactic, technique and procedure] needs to be adjusted. They flex it here, come through the rotation, and afterwards adjust SOPs and TTPs as necessary to help defeat that threat. JRTC keeps soldiers alive.

JRTC is constantly improving. We want soldiers to get out to the forward operating bases, combat outposts, joint combat outposts and other locations in what we historically call the box and truly feel that they are located in either Iraq or Afghanistan. We have tremendous training facilities and tremendous assets to replicate and allow soldiers to better feel the culture and the difficulties associated with working in those environments. We are in constant contact with both theaters to ensure that we incorporate emerging threats into our training so



Smoke billows at a JRTC training village.





Right and below, soldiers from the 4th BCT scan for threats during training.



our soldiers see it here first before seeing it in theater.

On the training side, as the command sergeant major of JRTC, I have oversight. My boss, BG James C. Yarbrough, and I ensure that soldiers and organizations are given the most realistic training possible. I also ensure that my TMs are not observing and controlling—which is old school, saying that you're a "go" or a "no go"—but are training and mentoring individuals at all levels. We're not out there to say "go" or "no go." We're out there to ensure that an organization and its soldiers are better prepared for combat.

The bottom line is this: If I save one soldier's life by the tough, realistic training that he or she has come through here at JRTC, I have done my job. I am all about saving lives and safeguarding soldiers, so that's my number-one mission.

I try to educate leaders and soldiers on security basics, how you keep yourself alive in a combat situation where you live among the locals. We have to ensure our soldiers are safeguarded.

I drive around looking at the force protection posture of our soldiers. Soldiers do not determine uniforms—leaders do, based on the threat and the environment. Leaders determine the protection posture, but if we, as leaders, educate soldiers on why they're wearing that protective equipment, it will make sense to them.

One of my biggest lessons in the field is to fight the enemy, not the plan. I know that you have a plan, but you need to be flexible enough as a leader to adjust. Once your enemy presents himself with hostile intent, it becomes a battle drill. And the battle drill is to find, fix and finish. My big thing is finish, finish, finish.

I think a sergeant major's role is primarily as a trainer. Twenty-plus years of experience has given me a set of eyes that see things on the battlefield. I see things in training that I know are not the right way of doing business.

My job as the sergeant major, the primary trainer—the guy who has done it at all levels, who has been a rifleman, grenadier, employed an M249, who has been a team leader, squad leader and platoon sergeant—is because I understand the frictions associated with serving at every level. As the JRTC command sergeant major, being the primary trainer is what I do. I ride out in the box, and I observe.

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Bullet holes are part of the effects in a JRTC training village.

And when I observe, I'm not there to say, "I've got you." I'm there to say, "Here's a better way of doing business, and I'll tell you why I think this technique will keep you alive."

I go into the box and advise commanders and their NCO leadership on what I saw and why I don't think it's correct, on why I think there's a better way of doing business. I offer them examples. I give them experience. I attempt to influence their behavior and the way they do business a little, aimed at the result of keeping a soldier alive. And that is truly what this is all about.

Historically, in our legacy Army, you hear "That's NCO business," or "That's officer business." Today I think you hear those words being changed to "It's leader business."

That's because NCOs are so diverse in today's Army, and so educated. Look at the education levels of most of our senior noncommissioned officers. Their education levels, in most cases, are very close to most of their officer counterparts. And I think officers are doing a tremendous job of leveraging the capabilities that they have around them. It's not position based; it's capabilities based. If you have a sergeant major, first sergeant or platoon sergeant who has the education and capabilities—technically, tactically, from the individual through the collective task capabilities—commissioned officers would be crazy not to leverage it. You have to leverage the capabilities that are around you.

In today's Army, I think the officers have absolutely done that. I think you're seeing partnerships formed at all levels in these teams, and the team at JRTC is the commanding general and me. At the BCT and battalion levels, it's those commanders and their CSMs—at the company level, the commander and first sergeant, and at the platoon level, the platoon leader and platoon sergeant. You're not seeing "us against them"; I think you're seeing a partnership. And everybody understands his or her role on the team.

To use a football analogy, the officers are the quarterbacks, the running backs are the NCOs and the line is our great soldiers who we have around us. The reality is that you're seeing teams—not "us against them," not "NCO business" or "officer business." It's leader business. If it affects our soldiers, if it affects the ability of the organization, it's leader business.

I absolutely see the division lines going away. I see teamwork, great command teams, and I see great noncommissioned officers advising and assisting commanders in making their organizations better and more prepared every day. It takes a good officer to leverage, and on the other hand, it takes a capable NCO counterpart—because it's capabilities based, not position or rank based—to give good advice to those commanders on how to utilize and employ soldiers on the battlefield.



A 4th BCT soldier pulls his buddy toward a Humvee during a JRTC exercise.

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Remarks by CSM Jeffrey Huggins
Command Sergeant Major, 4th Brigade,
2nd Infantry Division

I think officers in the U.S. Army have really grown in their education and their appreciation of what NCOs can provide them. It's no longer: "Hey, we do these things in the dark, and we'll let you know what they are later." Today NCOs are sounding boards. We have the experience; we've been out there doing it for a long time. And I think that's become a lot more valued by officers now that we are in strife and conflict as opposed to when JRTC or NTC [National Training Center] rotations were their Super Bowl, when that was what an officer got evaluated on. Now it's: The mission has to be successful. Who knows best what we need when we come up with the ideas of the plan? Well, it's the NCOs. We know what's going to work; we know what's not going to work. It requires a lot more team-level building. A team, that's what this brigade is. The colonel came in with a very clear vision of how we would build a team, and that was exactly my mind-set. I am part of a team; I am not an individual running around the battlefield. The "Raider Brigade" is a team. It's a family organization where we are concerned about everything from the family readiness groups taking care of the families back home to every one of my casualties and what's being done for him or her. If somebody's in a fight and they need us, then we're ready to roll out the door. And everybody across the board understands that we take care of each other.

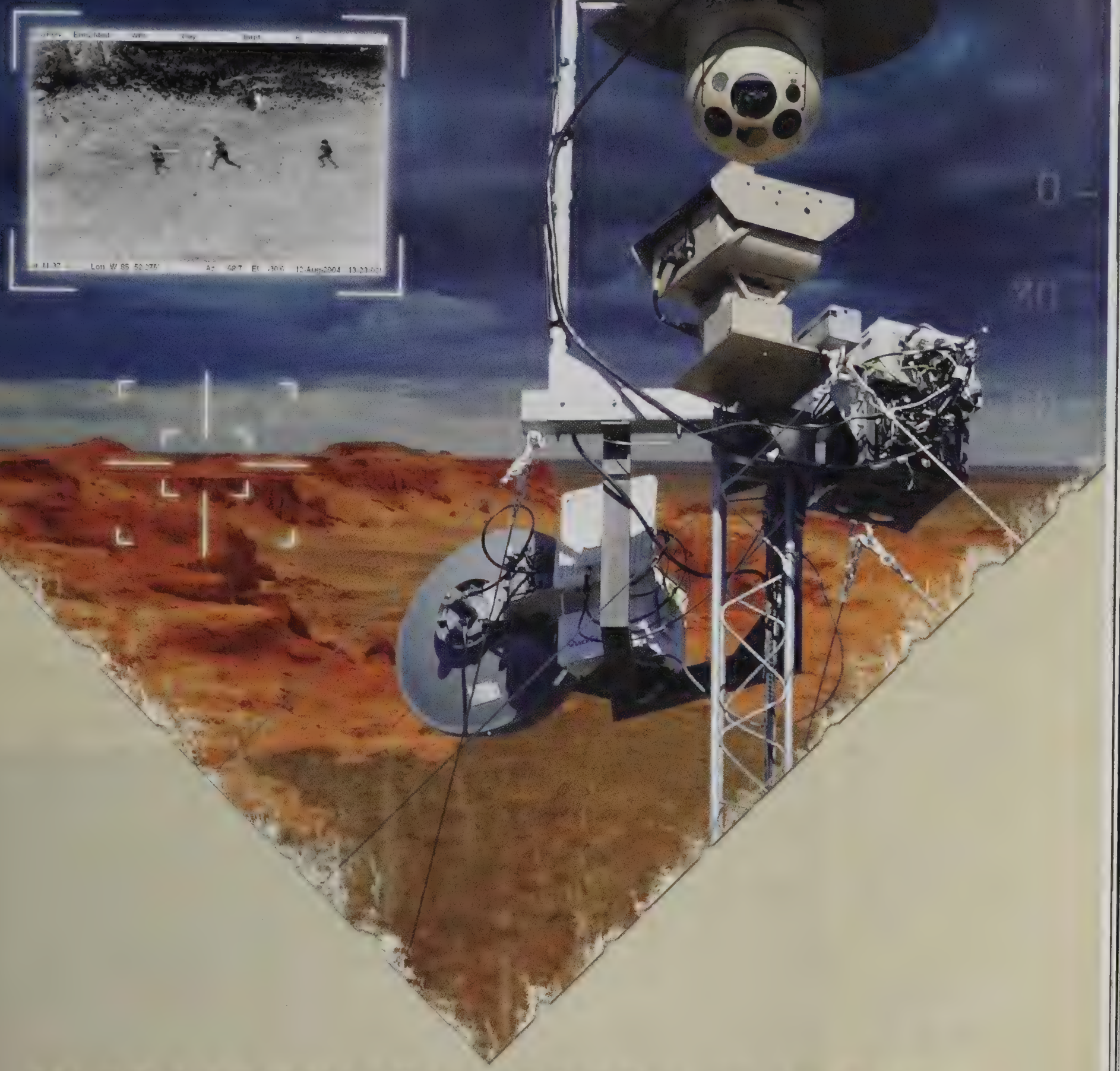
As noncommissioned officers, we make sure that the standard baseline of soldier discipline is never dropped. We always go out and look at the same things: standards, safety, soldiers—what they are doing, are they in the right gear, have they got everything they need to sustain them, and what's their focus? If their focus is wrong, then we're not going to win. So we make sure that they're acting in accordance with our guidance and make sure they understand how they should relate to the civilian population because this "strategic corporal" piece is a big deal. Any soldier has the opportunity to make us fail, so we have to make sure that they have a clear understanding of what reality is. As NCOs, we must make sure that they're in their equipment and wearing it properly for the conditions that they're in, that leaders are doing their job of inspecting and that they understand that while we may be a lone brigade doing the fight out there, those kids are not alone. If something happens to them, they know that we will be there for them, and they are not out there by themselves



SSG Louis Tirado, a JRTC trainer-mentor (TM), watches as soldiers handle a training scenario.



Live-fire training dummies await repair at JRTC.



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Handling multiple radios, a TM coordinates special effects for a JRTC training event.

We go out there to make sure they know we're paying attention to them, that we understand they're in the fight and we're out there with them.

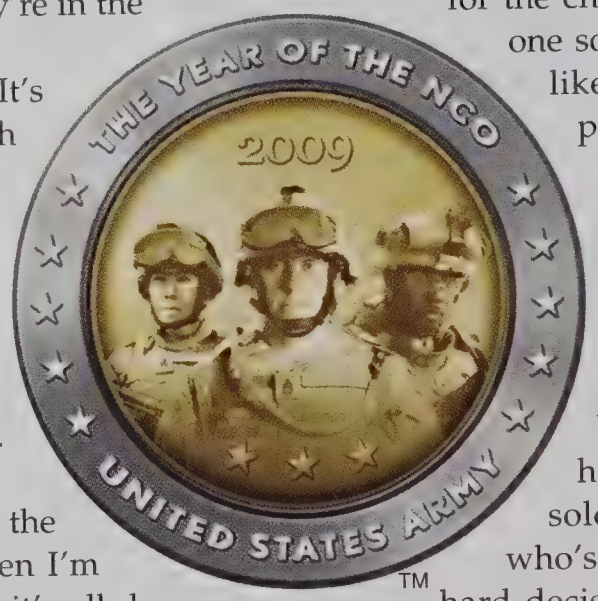
I think it is an honor to be a soldier. It's hard work. It's a strain on the family with all the deployments, but it's something I would recommend. It's a great way of life. I think that we're the only organization that cares about every aspect of you, from your family to the car you drive to how you balance your checkbook to your mental stability and health. Nobody else out there does that.

I've got to pick and choose when I'm the mean grumpy sergeant major and when I'm the happy jokester sergeant major, and it's all dependent on the environment we're in and what they need to hear. Sometimes it has to be hardcore: "Hey, you've got to stand up straight. It's time to go back and do it again." Sometimes, though, it's the right time to kick back and slap them on the back and ask how their family is doing or tell them a joke.

I always tell my soldiers that they need to know why. Soldiers are smart, and a lot of times when you explain something to them, they have a better way of doing it. But if you don't explain why, they don't get the commander's intent; they don't know what they are trying to accomplish.

And they have to understand how big a deal they are—if that private pulling security in that sector fails his mission, he may not understand that he's a security link for the entire brigade. That's how important that one soldier is. If you give them a mission set like that, it makes them feel like they're part of the team. They're important.

As NCOs, I think the biggest thing we have to get our heads around is—and I saw this on a sign the last time I was rolling into Iraq—"We need leadership, not likership." I think we've had a problem in the Army where everybody wanted to be everybody's friend. I have great relationships with most of my soldiers, but there's never a question of who's in charge, and when I have to make a hard decision, they understand that I have their best interests at heart. If you don't do that, then it gets con-





A Stryker creeps into a JRTC military operations in urban terrain site.

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Soldiers from the 4th BCT enter a building to clear it.

fusing, and the chain of command falters.

NCOs need to understand that when you inspect a soldier, you aren't questioning that soldier's ability; you're validating what your responsibility is as a noncommissioned officer. Your job is to make sure that the standards are adhered to, that your soldiers are straight all across the board with their equipment, with their morals, with how they do business, and how the Army is viewed by the populations of both the United States and the world. The second anyone thinks we're full of rabble, they will lose respect for us.

When I joined the Army, I was looking for the discipline, the adrenaline. I joined the Army to be an airborne Ranger, and that's all I wanted to do. I wanted to see what I was made of. I wanted to go with the best. I wanted to learn. My dad is a Vietnam veteran. He never talked about Vietnam until I told him I was joining the Army. Then he told me about being a leader. He said, "Don't ever fake leadership. People's lives depend on you. If you're out there to punch a ticket, you're going to get somebody killed."

Remarks by CSM Julie Walter
Command Sergeant Major, 202nd Brigade Support Battalion (BSB), now reflagged as the 702nd BSB

A lot of people have asked me why I never became a warrant officer, and I've told them that it's because I always thought about being a sergeant major. As I moved through the ranks, I just thought that's where it is—leadership of the soldiers.

The bottom line is that the NCOs are in charge. That's what I tell my guys: You are in charge; you are the guys who make everything happen. And I really believe that, especially for the senior NCOs. I try to push that so I can empower them. They have so much power as individuals and in their ability to influence individuals in a good way, so I really try to lead by example and show them that they're in charge. They're the ones responsible for leading their soldiers.

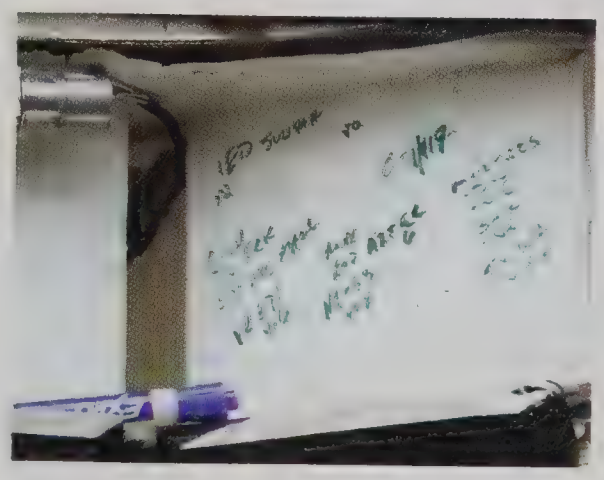
My command philosophy includes three things. Basically, what I tell brand-new soldiers when they come into the unit is first, Army Values. You have to live by the Army Values. And then I tell them that I want them to live by the NCO Creed. I even tell the privates that, and the reason is that one day they are going to be leaders. So if they start thinking about that and start being instilled with that now, I think it will help build them as junior leaders. The Warrior Ethos and the Soldier's Creed are the third thing. That is my entire philosophy. I said, "Why make something up? It's already given to us." All we have to do is emplace it, enforce it and lead by it.

It's a difficult balance in trying to just teach, coach and mentor soldiers and let them try to go as far as they can. I try to guide them, give them guidance, a task and a purpose, let them do it and then come back, supervise, check, AAR [after action review] it and let them do it again, especially something like a CLP [combat logistics patrol]. I prefer teaching and coaching them through it. Something like that is hands-on—they have to go and actually do it. It's hard for some soldiers to conceptualize how to stop at a short halt or a long halt. They have to see and do the battle drill for that.

My training point for this JRTC rotation is first, discipline. If we instill discipline in everything, I think they'll be better soldiers all the way around. Along with that is teaching individual soldier skills such as security, communications skills, self-defense, tactical care/first aid and weapons systems.

But even down to the lowest private, I also think it's vital to get them to understand how important they are in the whole piece.

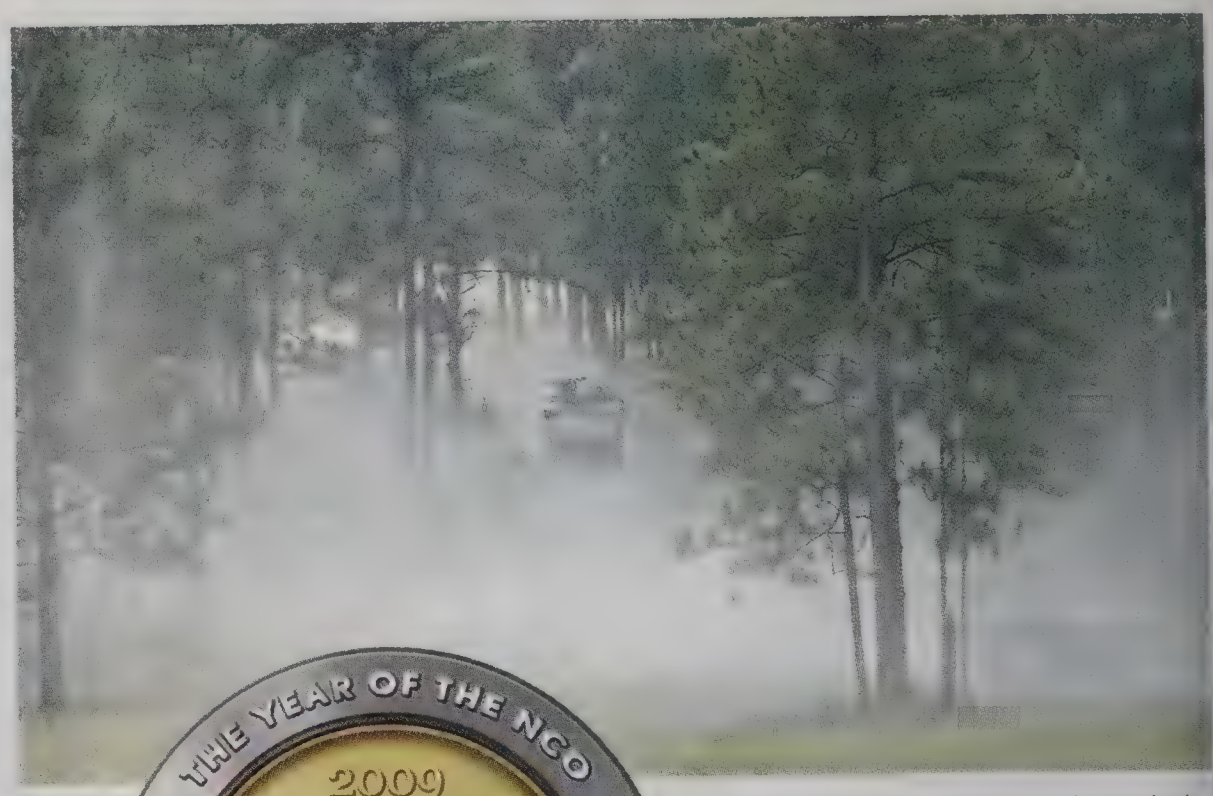
The training at JRTC has been excellent. Even if we could replicate this training at home station, it would be hard to block out other distractors, the normal home-sta-



Notes are written inside a Stryker vehicle.

tion distractions. It would be difficult to get everyone to focus on what we're doing and what we're getting ready to do. I'm personally glad that we came down here, and I think the trainer-mentors have been excellent. They've been able to give advice and teach, coach and mentor at the same time, as opposed to just standing back and taking notes. They've been totally engaged. My trainer-mentor has given me great tips—great things that he sees about everything going on. I've been able to ask him about what he thinks I need to fix, and that's awesome.

Basically, the things that he has addressed involve helping my commander and keeping a good, tight relationship with my commander. He thinks we have that foundation, so we just need to continue to grow that while I also continue to help my company-command teams to build that relationship between their commanders and first sergeants, and help the staff and the company commanders come together as a team. My TM has been looking at the overall big picture for battalion sergeant major—where I can influence the battalion the most.



Strykers advance through the pine trees of Fort Polk.



SPC Brittany Bell, a 4th BCT medic, protects the perimeter around her Stryker during a halt.

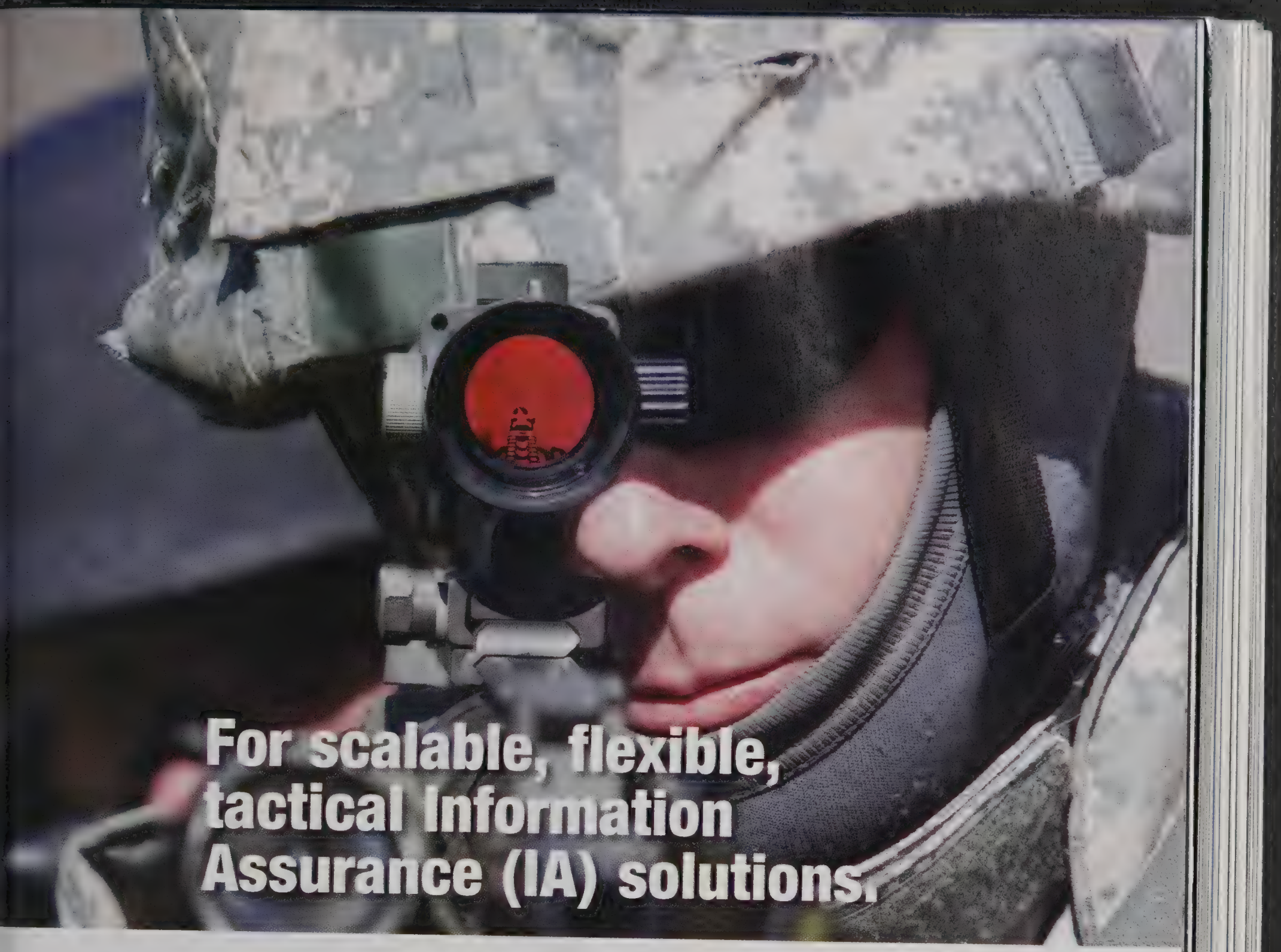
I'm taking from this training that I need to help maintain the partnerships, establish responsibilities and duties—making sure everybody knows what they are supposed to do—and continue to try to empower the NCOs, continue to instill discipline and the need to stay focused on soldiers.

For me, leading 700 or so soldiers to Iraq is very humbling—the responsibility for looking out for all these soldiers and making sure they're safe and that they all come back.

Remarks by SGM Vincent E. Jones Sr.
Task Force Sergeant Major,
Operations Group, JRTC

My job is the senior noncommissioned officer of Task Force 1, an infantry task force that covers down on infantry battalions that come through JRTC. I pretty much oversee all the training of the RTU [rotational training unit] battalion and ensure that our TMs are coaching, teaching and mentoring the RTU according to operations group standards. The biggest thing is that I am the counterpart to the battalion command sergeant major. My job is kind of different because I don't think I'm training the battalion command sergeant major. He has his own way of how he wants his battalion to run. I'm more of the eyes and ears for the battalion sergeant major, looking at his companies. He gives me focus points, and I give him feedback on how his companies are doing.

The focus points of this sergeant major involve the tone and stance of his soldiers, making sure they are respectfu



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JRTC role-players enhance training realism.

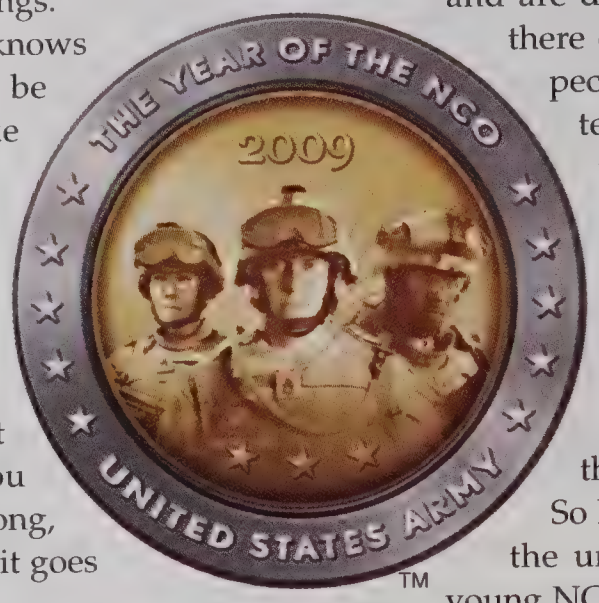
to the populace but also making sure they can flip the switch when they are confronted.

I'm not with him 24 hours a day, seven days a week, because typically when you attain the rank of sergeant major you know what you want to see. You don't need anybody escorting you or pointing things out. I'm not with him 24/7 because I only want to give him two or three things to chew on at a time. If you're with him 24/7, you're constantly telling him this is wrong or that is wrong. Pretty soon the hearing aid gets turned down, or he pulls it out—he's not listening to you. So you give him a couple of things at a time that he can focus on, and they have to be big things.

You have to be diplomatic. Nobody knows everything, and you really have to be diplomatic. The sergeants major take ownership of their battalions, and you have to come at them a certain way. You can't say "Hey, this is screwed up." He's the master trainer of that battalion, and if you tell him that this is screwed up, it's on his shoulders. So you have to come a different way about it—typically, as NCOs we can tell you everything that's screwed up all day long, but if we don't have a solution for you, it goes in one ear and out the other.

I enjoy being a master trainer. Besides coaching, teaching and mentoring units that come through here for training, I also have to coach, teach and mentor my enlisted soldiers and officers for their tasks.

As a senior leader, when I show up around TMs, they sometimes get nervous, different. So I try to make them comfortable. Yes, I'm the sergeant major, but I'm still a human being. Everybody knows I'm a sergeant major; I don't want them doing things crazy because I show up. I want them to be themselves, too.





Sweat pours off SGT Brandon McKinney, Troop A, 2nd Squadron, 1st Cavalry Regiment, during the 4th BCT's training rotation.

As always, I make sure they're in the proper uniform and are doing the right things. As they are out there coaching, teaching and mentoring—especially escalation of force—I observe. After sitting back and letting the RTU set things up in a way that is not correct, I might come and coach, teach and mentor them. But the worst thing you can do is get out there and talk to the RTU as a sergeant major and direct the way they set things up. A TM might think that because the sergeant major is out there, I must be doing something wrong. So I coach, teach and mentor them. Just like the units that come through here, we have young NCOs to groom and coach, teach and mentor the right way.

My personal philosophy on NCO leadership involves having a variety of different types of leaders—guys who lead by fear or guys who lead by rank. My personal philosophy is that I lead from the front. I try to be me SGM Vincent Jones—the same as my dad, who was an NCO. I watched him as I grew up in the Army.

I used to be a hell-raiser, yelling at soldiers and the whole nine yards. Now I think if I talk to them and show them what they did wrong, and if together we can find out that we can fix it, it's a lot better. I don't think they will tune me out as fast as they would if I came out yelling and cussing and screaming at them. Everybody makes mistakes. I made plenty of mistakes throughout my military career, and never thought I would make it to ser

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geant major—but I had some good senior NCOs who took me under their wings to groom me to be the person I am today in the Army.

Remarks by CSM Robert Gallagher
Command Sergeant Major, JRTC Operations Group

A sergeant major needs to be approachable. If your personality is such that people don't feel that they can come and talk to you, you lose some of your effectiveness as a sergeant major—especially the ability to feel the pulse of the organization and the morale, especially in an organization as large and as varied as an operations group that has ACU [Army combat uniform] wearers, civilian employees and contractors, who all fall within our group and are all part of my responsibility.

I've kept my eyes and ears open my entire career, watching the good with the bad and seeing what is effective and what isn't. The more effective leaders I've seen were the more approachable ones.

You can improve just by gaining a situational awareness, understanding what the "little people" do—because without the little people, the organization doesn't work. There's a whole host of things that go on behind the scenes. So leave yourself open to everyone, senior and subordinate, and your efficiency is increased across the board. At the end of the day, it's not one person, it's the entire team.

I love being a sergeant major, but every position has different pros and cons, its ups and downs. To me, maybe the best noncommissioned officer position is platoon sergeant—going to combat with a platoon of men and the application of force and precision fires that you have a role in controlling is just an incredible responsibility. And you have to step up to the plate for it. It's the same thing as a first sergeant—a fighting first sergeant in combat. Being a squad leader is the hardest job in the Army, without a doubt. You've got to lead two fire-team leaders with a grand total of nine men, including yourself, and maybe you're about 21 or 22 years old. There's nowhere else you're going to get that responsibility—the responsibility for the health and welfare and lives of those soldiers and also to be the "strategic sergeant" on a street corner in Baghdad or in a province of Afghanistan. Where else can you get that? That's why I stayed in the Army, and that's why I love it.

No matter what rank, you always have to remember what it was like to be that other guy. I am here actually because I've made mistakes. I've made honest mistakes, and people recognized they were honest mistakes. I learned, but it was only their teaching and mentoring that enabled me to do that.

No one joins the Army to retire as a PFC; we're in the business of making leaders, and that's what we do.

My guidance to TMs is to develop a relationship that's open. What I don't want is our trainer-mentors to stand back with a notebook in their hands, just writing it down, and then, three days later, regurgitate it and say, "You did this

Military police leaders discuss operations with an Iraqi police officer role-player at JRTC.

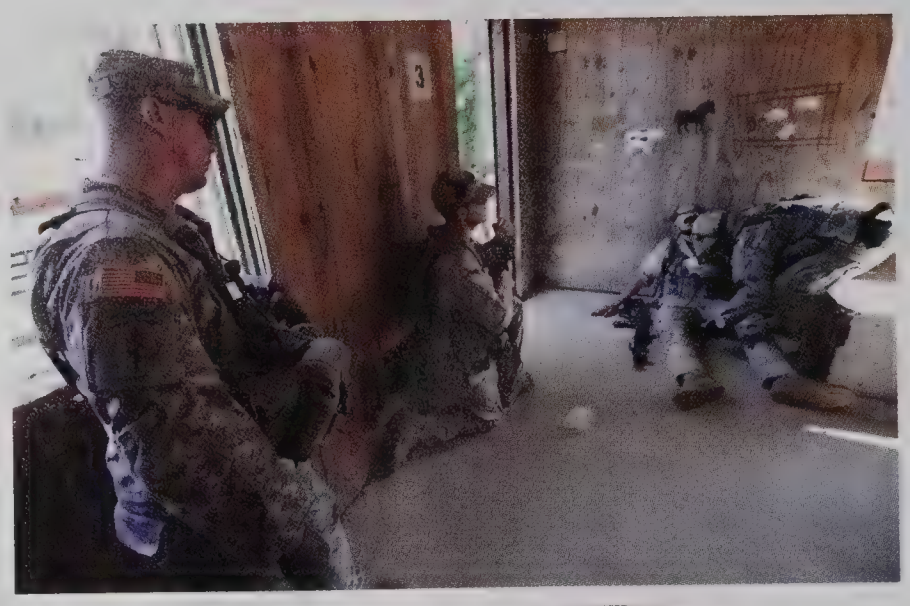
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SFC Brad Moyers, left, a JRTC medical TM, observes as soldiers treat a mock casualty.

wrong, you did that wrong, and this is how to do it better." Your personal interaction—not only with your counterpart but with your counterpart's soldiers—is going to set the conditions for whether they come away from the rotation here learning or just suffering a beatdown. We're past that day and age where the beatdowns occur. It has to be a learning environment.

No matter at what level an organization comes to JRTC, it is going to leave at a high level. A large part of that depends on the relationship of the TM with his or her counterpart. So let the mistake be made, but don't undermine the leadership in front of the soldiers. Just pull them off to the side. Punish in private; praise in public. We're not here to undercut or undermine the chain of command. We're here to help them, and the most important things are to instill in the soldiers confidence in themselves, their leaders and their equipment.

In many ways, I'm jealous of the folks who come here because they are deploying into one of the theaters, but at the same time, the bottom line is that it's our function to prepare them so that their time in theater is successful, especially within the first 60 days.

During the training, we have to balance kinetic actions with the nonkinetic, especially the ability to direct precision fires in an urban environment at the right target at the right time. Probably there are more nonlethal activities occurring here than lethal, but soldiers have to be prepared to switch at a moment's notice. The best way I've ever heard it put is "tone and stance." Just your physical appearance—the way you carry yourself, the way that you present yourself to the population—says a lot about the reason you're there. But at the same time, you have to be able to deliver precision fires in an urban environment.



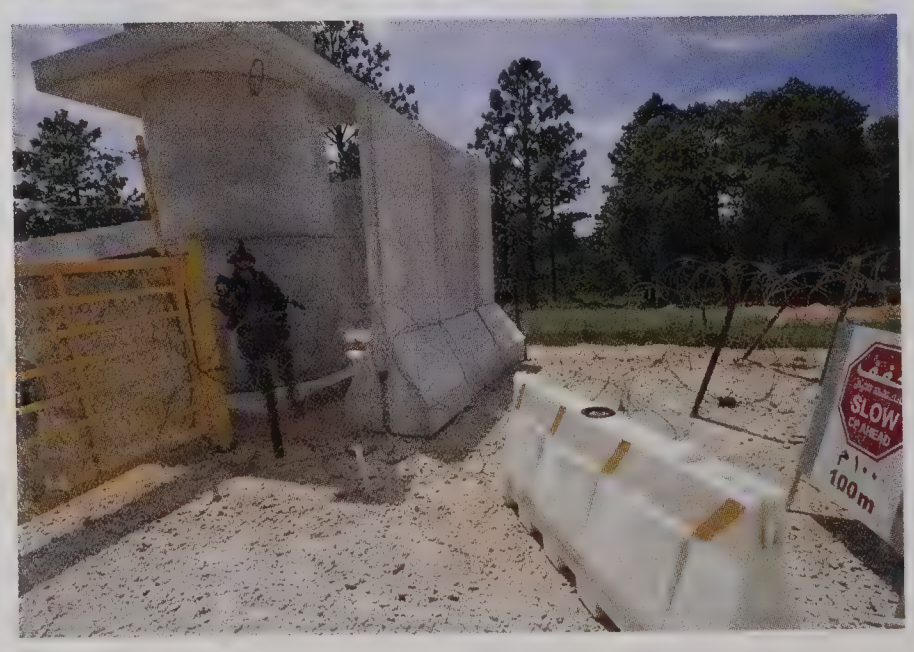
Imagine a team leader—who could be 18 or 19 years old—a young sergeant who is responsible for the application of force in accordance with the rules of engagement and in support of national policies. He has to make decisions that not only support his fire team but national policy.

In today's environment, every action has the potential to be a headline on TV in 20 minutes. Our soldiers have to live up to the Army Values. In the absence of anything else, if you follow the Army Values, you'll do well, and no one can second-guess a thing that you do.

The NCO Corps and NCOs have to evolve. You can't be that guy who is living in the 1990s. It's 2009, and you will be treated as a dinosaur if you're not able to stay abreast.

December makes 28 years in the Army for me, and I've been an NCO for 26 years. If I could go back to day one as a sergeant, and if I had learned the importance of the three confidences 26 years ago, it would have made life a lot easier as an NCO: Build soldiers' confidence in themselves, their leaders and their equipment. ★

SSG Mark Dubuisson, 4th BCT, inside a Stryker.



A 4th BCT soldier guards the gate at a JRTC joint combat outpost.

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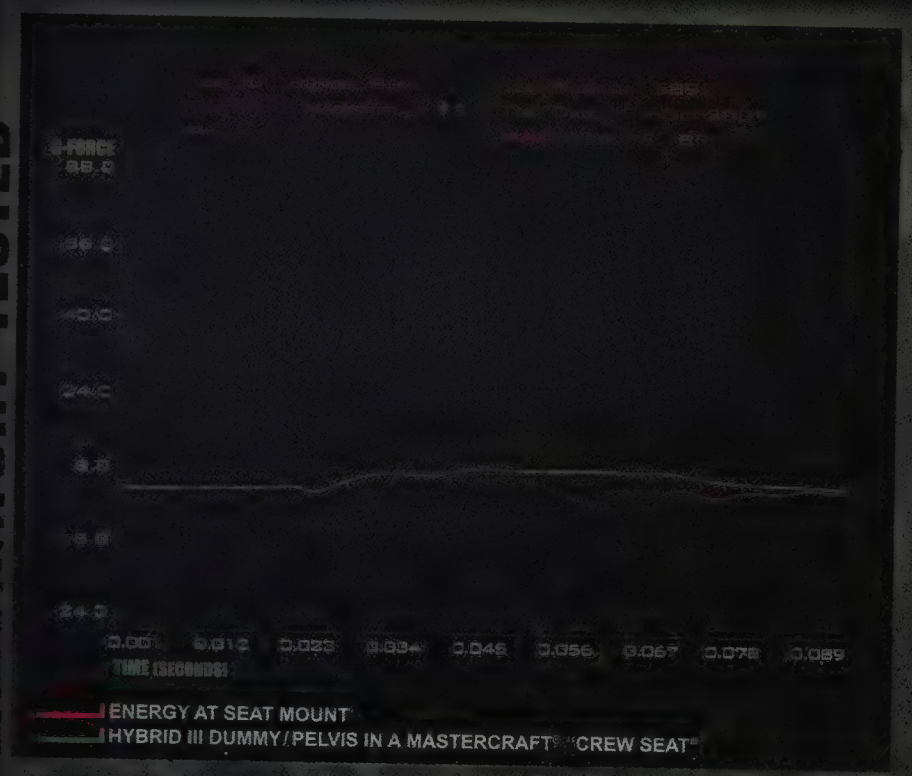


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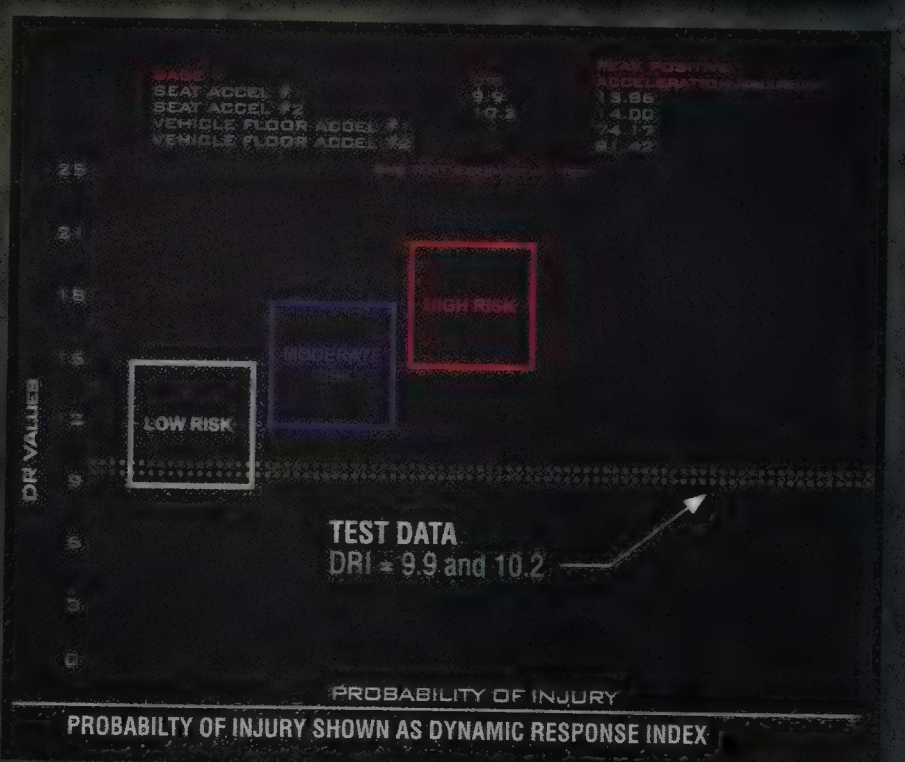


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Persistent Conflict or Containment:
Alternate Visions Of Contemporary Conflict

By COL Gregory Fontenot
U.S. Army retired
and COL Kevin Benson
U.S. Army retired

In 1946, the Army G-2 published the first *Intelligence Review*, a confidential weekly assessment of trends and major intelligence issues. In the opinion of the Army G-2 intelligence community, the vast span of Islamic countries was a threat to stability and, ultimately, peace on the planet. The review described the strategic importance of the Muslim world, noting that it "sprawls around half the Earth, from the Pacific across Asia and Africa to the Atlantic, along one of the greatest of trade routes; in its center is an area extremely rich in oil; over it will run some of the most strategically important air routes."

The analysts concluded that Muslims "are painfully aware of their present economic, cultural and military impoverishment. Thus a terrific pressure is building up in their collective thinking." The influence of the Wahhabis, the Sunni/Shia split and the Muslim Brotherhood all seemed, to the analysts who wrote this article, to produce anti-Western, anti-Jewish and anti-Christian views, not to mention reactionary thinking. Economic disparities in Muslim countries, driven both by the consequences of imperialism and what amounted to feudalism (still apparent, for example, in Saudi Arabia), added to the pressure felt in the Muslim world. The G-2 analysts also thought that political rivalry and nationalism played a role as irritants in the Middle East. They asserted that European powers meddled and took advantage of these conditions when and where they could—referring to Great Britain and France, of course, but Mussolini and Hitler interfered as well, particularly with the Grand Mufti of Jerusalem and Rashid Ali al-Gailani of Iraq, who were in the Axis camp. The authors observed that although the Soviet Union "showed little interest in championing religion," it had now advanced a claim as a protector of Islam.

Clearly, what many in the United States perceive as a post-Six-Day War phenomenon is not at all new; taken together with anti-Zionist and anti-Israel viewpoints and bitterness over exploitation, the major conclusion that the Army G-2 reached in 1946 remains relevant today. An atavistic view that returning to the Islamic past will produce a return to former prominence and power dates at least to the 17th century and the Wahhabis—it, too, resonates today. Al Qaeda and other more recent apparitions of radical fundamentalism are just that—more recent—but not very different from their predecessors.

Wisely, President Obama took a preliminary step in enabling the United States and its allies to confront the threat when he stipulated that we are not in a "global war on terror." Terrorism is one of the means al Qaeda and their ilk employ, but it is not a movement. If terrorism is one tool of al Qaeda and their fellow travelers, what might their other tools be, and is *persistent conflict* the only way to describe the problem or does that description limit not only understanding the problem but also coping with it? *Persistent conflict* is too limited a description; engagement with Islamic society need not always produce conflict.



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Understanding Begets Policy

Understanding the depth of the problem is the key to developing policy that will enable the United States and its allies to either defeat or deter the threat imagined in 1946, which is playing out now. Some have suggested that what is required is an overarching policy such as the post-World War II policy of containment. American policymakers behaved then as they do now—as politicians. They reacted and even overreacted, but they seldom developed policy in accordance with a sweeping vision of the future in which they aligned ends, ways and means against desired end states.

Thus the Chief of Staff of the Army and his colleagues among the Joint Chiefs are in for a long, rough ride in attempting to determine what kinds of forces are required for what kinds of roles (and where and when). Moreover, the problems that the United States and its allies must be prepared to confront are at least as complex as those the Army G-2 imagined in 1946. There are also near-peer competitors who may do harm if the Army and the armed forces presume too much about the future. Containing Islamic fascists and deterring them will almost certainly form a part of any reasonable long-term strategy for the United States. Deterring others—including states whose power vis-à-vis the United States is on the rise—will also require the means to do so.

Although there were several strategies of containment during the Cold War, the theme of containment remained constant while the means to achieve containment adjusted as conditions and administrations changed, as they surely must still. The theme of containing the spread of Islamic fascism must remain constant as the United States and its allies engage in all domains to improve the conditions of the people of the Islamic world while addressing their concerns, including perceived slights. Obviously, deterring and defeating Islamic fascists and others is likely to include operations across the spectrum of conflict. These manifold and complex problems require general purpose forces and intellectually agile officers who are able to link tactical success to well-crafted strategic objectives through the application of operational art.

The 21st century will produce different challenges from those posed in the symmetrical confrontation with the Soviet Union. The challenges affecting national and international security in the 21st century are broader than those of the latter part of the previous century. The United States currently faces challenges ranging from potential pandemic to piracy, failing states to international groups with malign agendas seeking weapons of mass destruction, and even increasing conventionally armed threats. The Army must be capable of assisting in attaining policy objectives in an environment where traditional organizations and means of responding to global challenges may be inadequate. National Security Advisor Gen James Jones, U.S. Marine Corps retired, wrote in a March 2009 memo: "The ability of the nation to successfully compete in global issues is being tested in ways that were unimaginable until recently … To succeed, the United States must integrate its ability to employ all elements of national power in a cohesive manner."

> ***If terrorism is one tool of al Qaeda and their fellow travelers, what might their other tools be, and is* persistent conflict *the only way to describe the problem or does that description limit not only understanding the problem but also coping with it?***

The New Operational Environment

Dealing with uncertainty and shifting requirements demands an officer corps educated both to think creatively and link tactical success with operational and strategic objectives in order to attain policy objectives. The operational environment requires general purpose forces that can respond across the spectrum of conflict—in an uncertain world, truly having the ability to combine offensive, defensive, and stability or civil-support efforts is a requirement for victory. Victory in the 21st century must be defined more accurately as attaining the policy objectives for which the war was waged. If the Army develops multiple kinds of forces optimized for narrow regions along the spectrum of conflict, it will limit policymakers' options. The United States cannot afford the Army the luxury of planning for only one war or, for that matter, one kind of war at a time. How, then, should the Army prepare officer

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***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he concluded his career in 1999 as commander of the Battle Command Training Program. He is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is currently director of the University of Foreign Military and Cultural Studies. **COL Kevin Benson**, USA Ret., served as director, School of Advanced Military Studies, and as the director of plans, C/J-5, Combined Forces Land Component Command and Third U.S. Army, at the opening of hostilities in Iraq, from 2002 to 2003. He works for McNeil Technologies and is currently a seminar leader at the University of Foreign Military and Cultural Studies.*

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for the level of mental agility that is required when dealing with the range of threats in the era of persistent conflict?

As yet there is no definitive statement of policy from the Obama administration on how the United States will proceed in this uncertain world and how we might conclude the stated era of persistent conflict on terms favorable to our nation. It is safe to assume that the defense of the country and of vital national interests will remain foremost. Clearly, the best course of action in an uncertain world is to optimize the Army for multiple points on the spectrum of conflict. Our nation requires an Army of general purpose forces that are staffed, equipped and trained to the highest possible level, led by broadly educated officers who have the capacity to link tactical action and success to attaining operational and strategic objectives, as well as officers who can render politically aware military advice in the course of assisting in the development of policy. We categorically reject the notion of the "strategic" corporal or lieutenant, as this implies that junior leaders will operate at the level of strategy. We agree that leaders at the tactical and operational levels must understand the relationship of their actions to strategy and how their actions might generate an unanticipated consequence at a higher level. The *sine qua non* of such an officer corps is education.

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Advancing Education

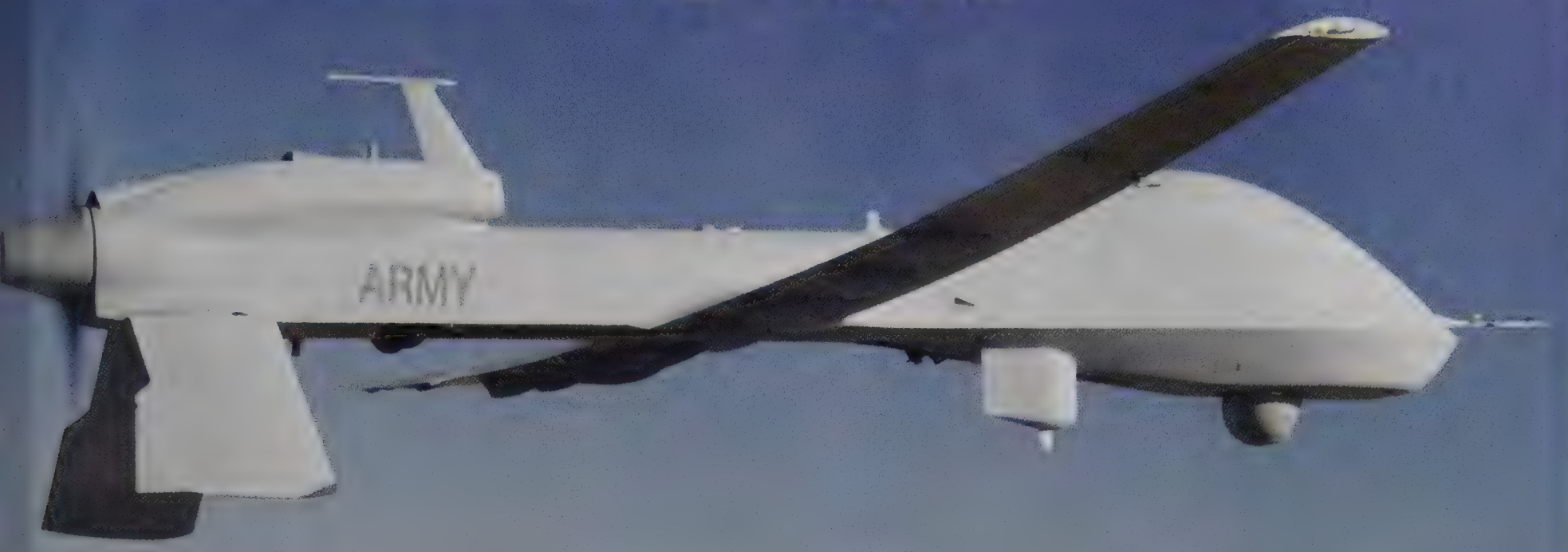
Our Army has always had a tension between "doers" and the need for "thinkers." In 1933, then-COL George C. Marshall sent a letter to MG Stuart Heintzelman articulating a series of points on the education that officers received from the Command and General Staff College. In 1983, GEN Edward (Shy) Meyer, then Chief of Staff of the Army, sent MG Guy S. Meloy to the Command and General Staff College with this same letter and guidance to evaluate the state of the college against Marshall's criticisms. Meloy concluded that while many things had changed, the essence of Marshall's criticism remained the same.

Given the quest for joint professional military education (JPME) I and II certification, "how to think, not what to think" tactics versus joint operations and so on, we might find that a similar investigation today using Marshall's criticisms would result in similar findings. The Army needs to decide what constitutes war in the 21st century. Based on this decision, the Army should determine what a general staff officer needs to know in the 21st century, what a School of Advanced Military Studies-educated officer should bring to the field above that level of knowledge, and what the U.S. Army War College must impart at a higher level.

The mantra today is that the Army is brigade-based, that this approach to force design is the form that best meets the demands of commanders. Divisions and the corps echelons, nonetheless, remain necessary to ensure tactical links to operational requirements. As an institution, the Army has yet to come to grips with defining the requirements of division and corps commanders who must direct disparate brigade combat teams over the depth of a battlefield or the battle space and ensure that the tactical actions of these brigade combat teams are nested within an intent and concept of the operation that does not waste tactical success and ultimately establishes military conditions to attain policy objectives. Our argument is that the Army should be "commander centric," rather than centered on a tactical formation. Commanders must also be supported by educated staffs that ensure that their commanders are able to command effectively. Staffs also support commanders by ensuring that all operations—skirmishes, engagements and battles—are sustained and sequenced throughout the major operation and within the context of campaign design.

The logical extension of the Army's current method of generating force will have the most ready division headquarters deploy to a theater of operations with a mix of the most ready brigade combat teams that fit the tasks assigned to the division headquarters. The same will be true for the corps headquarters and a range of divisions and brigade combat teams. Has the Army educated commanders and staffs of these echelons of command to sustain and sequence battles within the context of a campaign plan if, for example, the ready division headquarters is the 101st Air Assault and its subordinate brigade combat teams include two heavy, one Stryker, one aviation and one infantry, and associated fires, combat support and combat service support brigades? The Army's schools and centers have not been able to keep up with the rapid pace with which Generals Schoomaker and Casey have moved the Army. To their credit, the commanders and staffs from the very top of Forces Command and Training and Doctrine Command are moving at warp speed to ensure that doctrine, force design and equipping meet the needs of the force. Most importantly, education takes time. No amount of take-home packages, online systems or mobile training teams will reduce the time required to learn a language or a skill.

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Generally the focus of education and training in the Army has tended toward the tactical and practical, rather than the theoretical. The Army cannot neglect the theoretical. There are many competing hypotheses of what the future might entail. Right now the possibility of war on the Korean Peninsula is not out of the question. That possibility has not loomed very high on the to-do list, according to pundits or the Army as an institution. The theoretical gap in which operations other than counterinsurgency fall remains broad. In it are a host of issues that require attention: How does the Army make the transition and support transition in campaigns that begin with major combat operations? Where do the Army and the Joint team educate and train officers in scenarios where the Army, Navy, Air Force and Marine Corps are not safely divided (and thus protected from the tensions within the planning and execution of operations in which resources are constrained and in which the components must compete and ultimately make sacrifices for the team)? Where are officers educated to operate on high-level staffs that routinely must link operational requirements to strategic outcomes?

It is true that there are institutions that have requirements to do all of this, but are they effective? The Army's educational institutions have proven themselves time and again, but it is time to reexamine how the Army provides education, what is at the core of the Army's education system and what redundancies or gaps may exist in joint professional military education. What are the needs of the Army with respect to graduate education? GEN Schoomaker rightly emphasized providing as many officers as possible with graduate school experience. What should the focus of those efforts be? Not many years ago, the emphasis on graduate school education stemmed from immediate need. There are many claimants for graduate school products. Has the Army assigned the best priorities to support the development of strategic thinkers such as GEN David H. Petraeus? In some ways, he is the product not only of talent and hard work, but of serendipity. GEN Petraeus went to Princeton to prepare to teach at West Point. The Army should continue to expand graduate school opportunities without expectation of immediate application—with some exceptions, such as the security programs at top-flight Ivy League schools designed for Army War College fellows. Those programs should result in assignments in which graduates are in the practical-application phase of an education in policy formation.

The Army has a career-management field for Army strategists, but is it producing strategists or is it producing first-rate force managers and other types of institutional staff officers who may never affect strategy? Arguably, selection for the Army strategist program should be on a par with selection for the School of Advanced Military Studies—what could be more advanced than preparing to be an Army strategist? Still, there is evidence that the strategist career-management field is not necessarily difficult to join. What differentiates, really, the career-management field in strategy vice operations? What is the role of the operations career-management field? Is there overlap between the two? A review of the increased numbers of specialties that produce more officers who focus on less seems useful at this juncture. The Army cannot act alone in this arena. The Department of Defense should examine JPME, and perhaps joint concepts, to determine whether the various service and joint education systems are delivering the right "product" to the field.

Education alone is not the solution to developing the kind of leaders and officers the Army requires. Assignments not only in joint services critical billets but also in other departments of the government will be required to produce senior leaders who have the tactical, operational, strategic and political acumen that many of our best senior leaders demonstrate. Each opportunity that an officer is afforded should come with an injunction to think critically about what he or she has learned, or the opportunity will produce an officer who, like the mule in Frederick the Great's anecdote, will remain, despite his experiences, a mule.

Each opportunity that an officer is afforded should come with an injunction to think critically about what he or she has learned, or the opportunity will produce an officer who, like the mule in Frederick the Great's anecdote, will remain, despite his experiences, a mule.

In the future, ambiguity and uncertainty will prevail. Policy will continue to be reactive. Policymakers will not only react to changing conditions, but will also respond to the vicissitudes of politics. To operate in this environment the Army must produce leaders who are well prepared for both tactical and policy issues. Senior leaders must be politically savvy. The officers that the Army will require will not emerge in the absence of education and assignment opportunities that will enable them to inform their education on the basis of experience. The Army cannot afford to wait to solve this problem until the successful conclusion of the present difficulties, but should act now—with the agility it has shown brilliantly since 9/11—to prepare not only to confront the problems it faces today, but also those, however unlikely they seem now, that might confront the United States and its allies in the future. ★

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PENTAGON 9

The Pentagon 9/11 Memorial includes a variety of symbolic elements that commemorate the victims of the attack as individuals and as a group.

Dedicated last year on the seventh anniversary of the September 11, 2001 attack, the memorial has two main elements. At its core are 184 memorial benches, one for each victim (59 on the aircraft and 125 in the Pentagon). Each bench is inscribed with a victim's name and points in the direction relative to where each perished—a bench's wing pointing away from the Pentagon for someone who died in the building and pointing toward the Pentagon for someone who died on Flight 77.

11 MEMORIAL

Photographs by Dennis Steele

Lighted by individual reflecting pools, the benches stand in rows arranged by the birth year of the victim, starting with the youngest, age 3, and ending with the oldest, age 71. The rows tie in with the retaining wall that surrounds the memorial, which symbolically starts at a 3-inch height and rises to 71 inches. Plaques atop the wall show the birth year of each row.

The memorial site is adjacent to the impact point. Tree plantings dot the interior, which will eventually grow to seclude the benches. It is open to the public seven days a week, 24 hours a day, and it is the only place on the Pentagon's grounds where photography is allowed.



Dedicating the memorial, President George W. Bush said, "The Pentagon Memorial will stand as an everlasting tribute to 184 innocent souls who perished on these grounds. A memorial can never replace what those of you mourning a loved one have lost. We pray that you will find some comfort amid the peace of these grounds. We pray that you'll find strength in knowing that our nation will always grieve with you."

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From: Company Commanders

Considerations on Releasing a Detainee

If we command land-owning units in Iraq or Afghanistan, it is likely that a detainee will be released into our area of operations over the course of a deployment. Sometimes our unit will have detained the individual; sometimes a different unit will have. Some people in our AO will undoubtedly be thrilled that the person is being released; others may be terrified. Although we at the company level may not have the authority to determine who is released, we do have the ability to shape the conditions around a detainee's release in our AO. By being proactive, we can increase the likelihood that the detainee's release will support our mission. Listen in as some experienced commanders discuss their considerations on releasing a detainee.

Lucas Yoho

A/1-27 IN (SBCT)

Detainee release is often an emotional time for local-national leaders and the family of the detainee. Some community leaders are eager to receive detainees back into the community; others are not. Regardless of the temperament of the community leadership, I always release the detainee to the local authorities and allow them to execute the release to family members. Here are some of the things I do.

■ I determine what village or area the detainee is from. Just because he was detained in my AO does not mean that he lives there or has family there. I take his biological data and picture from his packet before the release and use that information to track down his family through community leadership. I also try to get a consensus of whether or not he should be released. Once I determine that he is from the area and that the community leadership is willing to accept him back into the community, I coordinate the release with the local police or other local authority.

■ I instruct the local authorities on how to properly release the detainee back to the family. I encourage the local leader to take credit for the release and to provide a stern warning to the newly released detainee about his expectations. I make them take pictures and take down contact information. I usually have the local government leaders present as well, to build credibility with the population.

■ I determine where the detainee will be living and who will be responsible for him. I usually hold a *nahia* member or other local official accountable. I have the company IS



CPT Lucas Yoho greets Sheik Abid at Joint Security Station Al Awad in 2008. CPT Yoho says that the relationships between the company commander and community leaders are crucial to the unit's acceptance into the community and ultimately to its success. Sheik Abid was a prominent supporter of Iraqi and Coalition forces. He was assassinated this year.

talk to the detainee to build a relationship for future source operations. This is crucial because the detainees will most likely have contact with nefarious individuals upon their release. We will often make them come back in and "check in" with us as well. We have ended up rearresting several detainees because they did not learn their lesson the first time. The local leadership quickly gave up locations when we advised them that the person they were vouching for was executing attacks.

■ I usually do not get involved with the actual ceremony. I always want there to be a "local face" on the release ceremony.

■ If the local leadership is not enthusiastic about a detainee's release, I usually defuse the issue by letting them know that the detainee will be watched and that the local authorities will also be watching this detainee.

■ If no one knows this detainee and the command is insisting that he be released into my AO, I will have the detainee call his family after his arrival and then work backwards to ensure local leadership is involved. This may take some time, but it ensures I have a link to the detainee.

■ I usually have someone take pictures of the ceremony and then publish the story in the local paper or use it to produce handbills, etc.

Update: As we were leaving, all Coalition DHAs were being shut down and everything was strictly Iraqi run. Obviously there were still some detainees that needed to be released through us, but for the most part, it was an Iraqi operation. The same principles applied to an Iraqi operation. I don't think ISF were keeping very good track of where particularly dangerous detainees were being released, nor were they interested in getting community leader support. They did not want to integrate IO/PSYOP into their releases. There was usually a big rift between community leaders and the ISF, and I was usually in the middle, trying to bring the two groups together. It is all about "teach, coach and mentor" with the ISF at this point. When it's all said and done, though, their "OK" way of doing things was better than our "great" way of doing things.



CPT Brian Sweigart discusses improvements made to a compact water treatment unit in the East Anbar Province, northwest of Baghdad. U.S. soldiers repaired and rebuilt the unit after a terrorist attack left more than 10,000 residents without potable drinking water.

Brian Sweigart
A & HHC/1-27 IN (SBCT)

The possible implications of a detainee's release are numerous and endless, depending on the individual being released. That being said, the most important factor to me was always whether or not he will upset security in the area through direct or indirect means.

Upsetting security by direct means, of course, is if he takes up arms again or goes back to leading/funding/recruiting for a local cell. By *indirect means,* I refer to whether or not the detainee is controversial among different groups in the area. By the individual being released, one group may feel that justice is not being served or that improper favor is being afforded to one tribe over another. Controversy of this nature could easily disrupt security even more than a detainee who simply goes back to planting IEDs.

To mitigate this as much as possible, there are two to three groups that you need to influence and engage ahead of time—local tribal sheiks, local security forces (NP/ISF) and SoI (if you have them). We typically had the detainee-release list a month before the individual would be freed. We would review the packet to see what the detainee was into, and then we would go engage the different power brokers listed above. While engaging the sheiks, we would identify the detainee's specific tribal sheik and ask the sheik if he would vouch for/guarantee the detainee. If the sheik agreed to vouch for the detainee, he would sign a pact to keep the detainee out of trouble.

If no one would guarantee or vouch for an individual and we still had to release him, then we would release him through the local police station to ensure that the local IP chief had visibility on this "person of interest" moving back into the village/area.

On release day, all prisoners would be reenrolled into BAT and HIIDE to ensure that we had them in our local database with current pictures and data. We also would have the



CPT Pete Exline reunites with his wife, Jessica, after a 15-month deployment to Iraq, during which he led detainee operations at Camp Bucca. CPT Exline's unit made "every effort—including top-notch medical and dental care—to make the detainees better off than when they came in."

sheiks and security forces at the release ceremony to let everyone see what was going on.

Pete Exline
66th FSC, 3-13 FA

This is a very interesting discussion for me, as my unit is doing "in-lieu-of" MP/detainee operations at Camp Bucca, Iraq. While I cannot add much to the discussion on how to handle things "outside the wire," I can give some insight on what we are doing "inside the wire" to prepare detainees for release—and maybe get feedback from those outside on what they'd like to see done.

We have multiple programs that are COIN efforts aimed at furthering a detainee's education (65 percent of the adults arrive here illiterate) or teaching him a trade skill like carpentry or agriculture. The education programs are widely available and well attended; the skill programs are smaller in scope. But we make every effort (including top-notch medical and dental care) to make the detainees better off than when they came in. We're trying to give them a productive alternative—to make an honest living and have the ability to read and form their own opinions and participate in their country. We are trying to set conditions for those of you on the outside to have the best chance of success reintegrating these folks, but our system is not perfect.

Also, detainees at Camp Bucca are allowed "visitation" from family members. Their families are reimbursed to travel here, and they bring news (quite often good news) about what is going on in your AOs. They also bring rumors and bad news with them as well. These bits of news spread like wildfire through the camp, often regardless of veracity. One of the biggest rumors of late has been that "detainees who are released are immediately rearrested by the Iraqi government or have to pay off bribes to truly be set free." While I know this is generally not true (the GoI approves the releases well in advance), this is the mind-set your detainee will likely arrive at your AO with, despite our assurances.

The techniques outlined by Lucas seem to be an excellent approach. I especially like how he strives to get Iraqi ownership of the situation and to put an Iraqi "face" on the actual release. This builds legitimacy for the detainee and the process. The media products are great, too—local Iraqi DVs mentioned their effectiveness to me very recently and asked for more materials written by the detainees still here! They want their citizens to see that not all of these de tainees are cold-blooded murderers.

That being said, some of the detainees are very danger ous, and despite our best efforts to vet them, inevitabl some will slip through the cracks. Keeping track of thei reintegration and contacts is a very good idea.

Michael Kuhn
HHD/19th MP BN & 66th MP CO

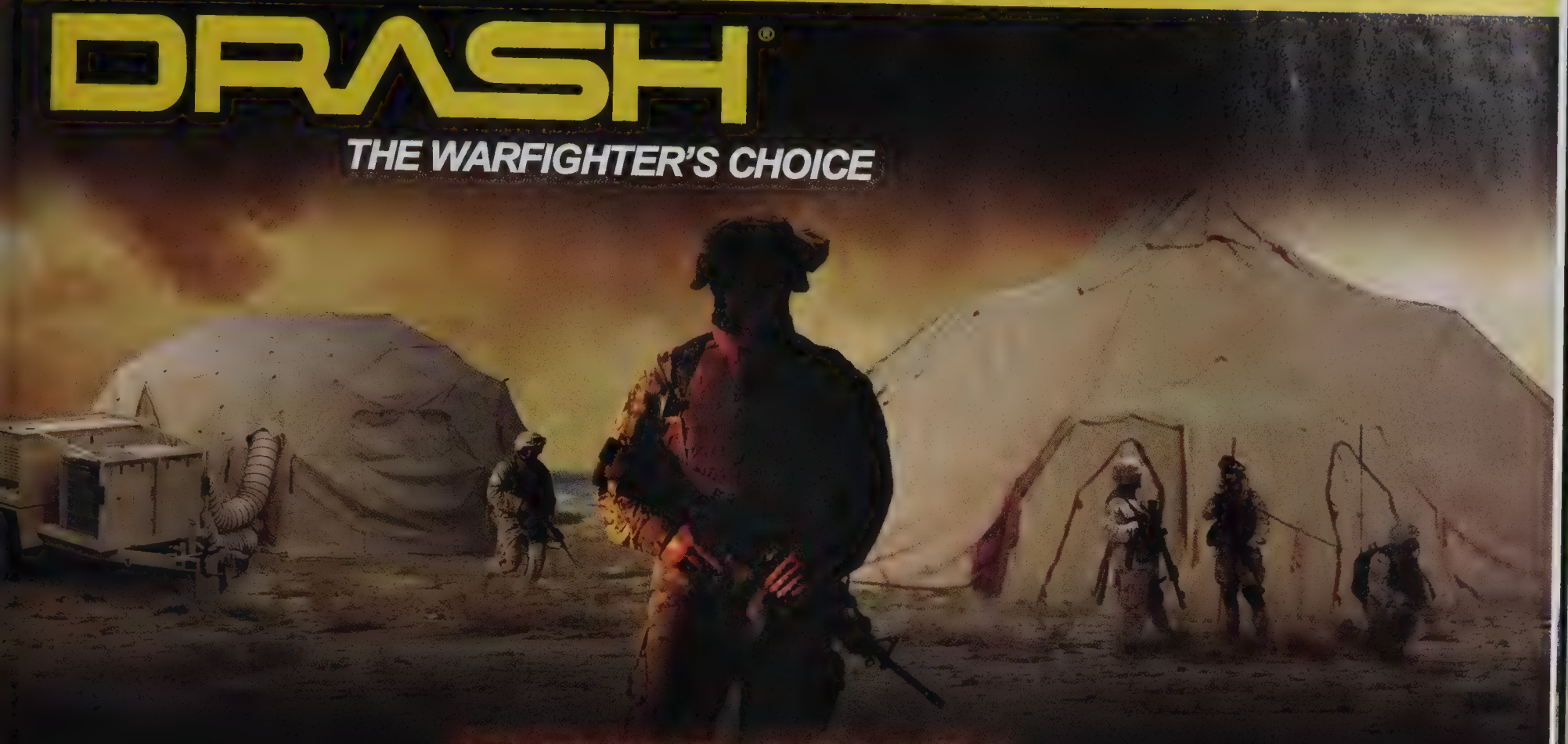
Working at Task Force 134, the Detainee Operation headquarters for Iraq, gave me a unique perspective o detention in a COIN environment. During my year there, w had to plan for the release of some detainees in accor dance with the expiration of UNSCR 1790 and the imple mentation of the new security agreement, while continuin to hold others in anticipation of prosecution by the govern ment of Iraq. Detainee operations in Iraq are estimated t have touched upwards of 2 million Iraqis, based on num bers that show almost 90,000 Iraqis have been detained a some level since the beginning of the war. When taken i this context, it is easier to see the impact that detainee op erations, from point of capture to release, can have on th population and our mission as a whole.

The release of detainees back into an AO presents unique problem set for local commanders. Even if securi gains have been made and support for the host-natio government has increased, the failure to reintegrate a fo mer detainee could potentially destabilize an area. On th other hand, recidivism rates in Iraq were less than 1 pe cent in 2008–09, contrary to the perception held by som of a direct correlation with increased violence. The emplo ment of basic COIN principles can help mitigate the sec rity risk and could actually increase support for counteri surgents through the building of trust. Guarantor program and local initiatives for employment can go a long way t

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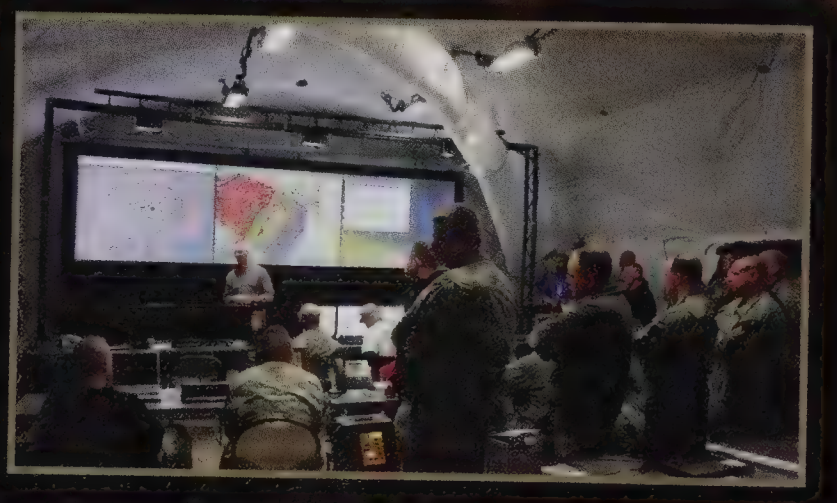
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CompanyCommand Glossary

AO—area of operations.
BAT/HIIDE—biometrics automated toolset/handheld interagency identity detection equipment.
BCT—brigade combat team.
COIN—counterinsurgency.
DHA—detainee holding area.
DV—distinguished visitor.
GoI—government of Iraq.
IED—improvised explosive device.
Intel—intelligence.
IO/PSYOP—information operations/psychological operations.
IP—Iraqi police.
ISF—Iraqi security forces.
IST—intelligence support team.
METT-TC—mission, enemy, terrain and weather, troops and support available, time available, civil considerations.
MP—military police.
NP—national police.
S-2/S-3/XO—intelligence officer/operations officer/executive officer.
SoI—Sons of Iraq.
TSE—tactical site exploitation.
UNSCR 1790—U.N. Security Council Resolution that authorized Coalition forces to conduct full spectrum operations; it expired at the close of 2008.

wards that goal. Many commanders have found that a dignified release of a detainee in concert with local leaders and security forces goes a long way towards establishing that trust and improving on existing security and discourages former detainees from rejoining the insurgency.

Dan Morgan & Becky Browell
HHC/3-502 IN & HHC/BSTB/4-101 ABN DIV

We know that this point of discussion focuses on the release of a detainee. In counterinsurgency environments, however, each operation is a smaller counterinsurgency in and of itself—and detainee operations are no exception.

You can talk smack about COIN (money, development, etc.) all you want, but the bottom line is that we have to get the bad dudes off the streets; it's essential to separating the enemy from the population. Capture, however, is only as effective as your detention process. If that process is good, it pays huge dividends in understanding the enemy and even the population, for it is through the detention process that other Soldiers (intel, MP, etc.) are able to wage a counterinsurgency in the prison camp. So it behooves us to get the "detain-or-release" decision right.

At the company level, we control only two aspects of detention: the actual detaining of the individual on an objective, and then his reception and release back into the area after the mandatory time in detention. We control nothing in between. What commanders can do for the in-between portion is ensure that our battalion's intel gurus provide us the information from the tactical questioning and interrogation so we'll have a better understanding of whom we detained upon his release. This enables us to further target the hard-line enemy and his leadership/facilitators and better reintegrate former detainees back into society and use them to further separate the enemy from the people.

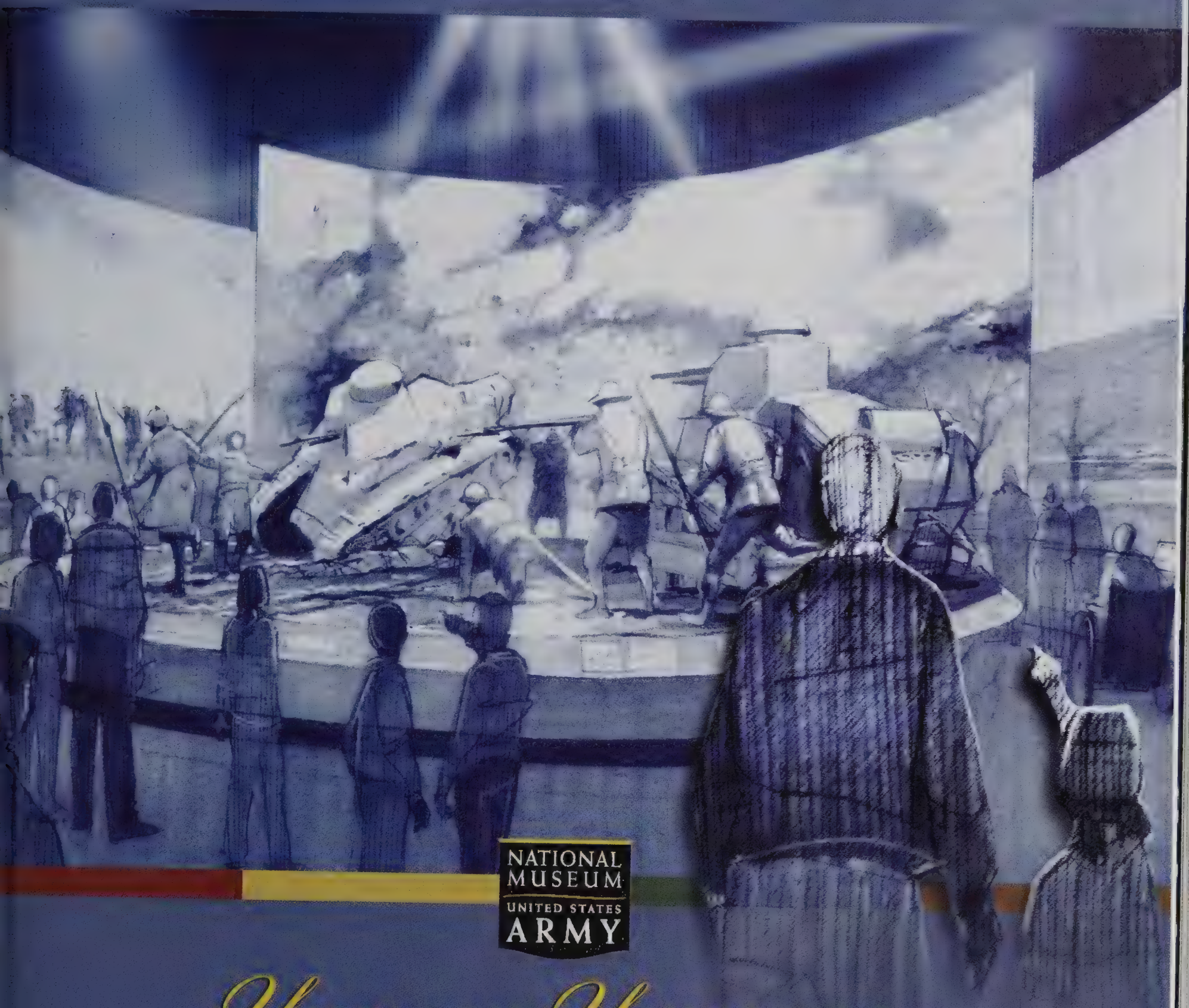
Regarding what a commander can control about detention, another important aspect is conducting the best tactical site exploitation that METT-TC allows. We realize that this conversation is about what to do when detainees are released, but the better the "evidence" is against an individual, the more likely it is that the right people will remain detained. During the actual detention process, we must utilize and exploit the technology and capabilities available, whether or not we like them. BAT/HIIDE and gather all the biometric data that you can on the detainee. A



MAJ Dan Morgan, shown here on a helicopter reconnaissance of the Korengal Pass, argues that it is "critically important that we treat our detainees humanely and with dignity, despite the stress we feel."

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CPT Becky Browell, here flying in a C-130 aircraft, believes that an effective detention process, which requires both home-station and in-country training, "pays huge dividends in understanding the enemy and even the population."

though late in its integration into the war, the database is being built and leading to the right decisions. The odds are that the individual detained knows that if he says nothing for a few days, he will be released. So if you do not set conditions up front with the detention and TSE, then he will just rotate through the process as if in a revolving door, even if he is an actual enemy.

Our Soldiers have to be intimately familiar with what meets detention criteria in whatever theater we're deployed, as well as what the local judicial system considers evidence in that country. Ask your lawyers and battalion S-2/S-3/XO. Demand it from them. If they do not know, go to the battalion commander for resolution. Things like sworn statements from "noninfidels" and photos of contraband items make all the difference in the world.

It's also critically important that we treat our detainees humanely and with dignity, despite the stress we feel. Yes, it's difficult sometimes. But if we fail, it only comes back to haunt us on the battlefield through negative media reports, violations of our principles by our own Soldiers and leaders, and more of the enemy outside our combat outposts. On the other hand, treating detainees with respect helps to separate the "hard-line" enemy from the "reconcilable" in the prison camp, thus promoting the counterinsurgency in the prison camp and ultimately benefiting commanders outside the wire upon the detainees' release.

Despite our 12-month deployments (a relatively short time period in the indigenous cultures), we must look toward achieving effects that will be felt two to three years after our deployments end. Very often, we will not see the true benefits of our detainee-related efforts during our deployment. It takes time. We have had a few instances in which the biometric effort up front paid off for us, when an individual was detained and released but then later recaptured through site exploitation where his biometrics popped hot. We were able to go through the tribal leader to have the individual recaptured. We have also had success in Afghanistan (and Iraq) with handing over some local nationals to the tribal leader. This brought shame to the family and tribe and allowed us to isolate them from any development until they demonstrated better resolve to support not only us, but also the local government and security forces.

What do we recommend to successfully execute detainee operations? First, train the detention process (and the patience and discipline it requires) at home station and reinforce the detention process, ethics and human dignity every 30 days during the deployment. Second, remember history. Future leaders emerge from conflict just as our revolutionary (or insurgent) leaders did against the British Crown in the 1700s. Third, fight like hell to get your battalion and BCT on board with the process and consider a reconciliation team at the battalion level to help in the identification of so-called reconcilables. Our goal should be unity of effort. Fourth, relentlessly pull information from Higher on every individual you detained and sent higher. The detained will come back to us, and our mission and Soldiers will depend not only on the counterinsurgency in our AOs, but also on the counterinsurgency in the prison camp by other Coalition forces.

We thank Mike Kuhn for starting this important conversation in the CC forum. To engage in this conversation and others like it—all focused on becoming more effective commanders and leading more effective units—get involved at http://CC.army.mil.



Soldier Armed

WIN-T Update

By Scott R. Gourley

With approximately 51 percent of the U.S. Army now equipped with Increment 1 of the Warfighter Information Network-Tactical (WIN-T), U.S. warfighters are already enjoying enhanced networking capabilities "at the halt" down to the battalion level.

Even more significantly, the completion of successful testing earlier this year has paved the way for the near-term fielding of follow-on WIN-T Increment 2, which will build on the Increment 1 capabilities and provide initial networking "on the move" down to the company level for select maneuver brigades.

An early introduction of mature on-the-move technology, the Increment 2 network is described as "self-forming" and "self-healing." Service descriptions note that the network "will reset itself as vehicles move in and out of each other's range, allowing for continuous communication between soldiers."

General Dynamics C4 Systems is the prime systems integrator for WIN-T and is teamed with Lockheed Martin, BAE Systems, Harris Corporation, L-3 Communications, Juniper Networks and CISCO Systems.

"WIN-T is the Army's tactical enterprise network—its mobile, deployable Internet—supplying broadband and telephone service to the Army," explained Bill Weiss, vice president of Tactical Networks for General Dynamics C4 Systems. "Commanders use the network as a portal to gain and maintain awareness of what's happening in the world around them, and to command their troops."

"WIN-T's hardware consists of an array of networking gear—the kind of routers, switches and computers that can be found in office wiring closets across the United States—combined with radio and satellite communication equipment mounted on shelters and built into combat and support vehicles," he said. "WIN-T's controlling software features an advanced network operation layer that serves to connect dispersed forces automatically. Military formations will have built-in WIN-T networking, reducing the signal infrastructure needed for movement or maneuvers.

As a result, commanders and their staffs can communicate point-to-point or in 'conference calls,' and are no longer dependent on line-of-sight communications."

The Army's experiences during Operation Desert Storm, Weiss said, made it "obvious that its high-capacity network could not keep up with quickly moving forces. WIN-T was conceived to enhance the Army's mobile networking capabilities, and a development contract was awarded in 2002. The capability void was reinforced in 2003 during Operation Iraqi Freedom as combat teams made the sprint to Baghdad, and the WIN-T program's key focus shifted to accommodate the Army's move to support more mobile brigade forces."

Thus the joint network node (JNN) was created, which is now Increment 1 of WIN-T and solves the modularity problem needed to support the brigade construct.

"In June 2007," Weiss continued, "WIN-T was restructured to address the Army's goal to provide soldiers down to the company level with on-the-move networking, [with] each increment building essential improvements over the previous increment. Increment 1, the former JNN, enhances existing joint networking and stationary satellite communications. The Army will continue fielding it until Increment 2 is ready. Increment 2 delivers initial on-the-move broadband networking capability using satellite and radio links. Increment 3 continues the development of WIN-T components to enable increased network capacity and security, and it enhances on-the-move capabilities while reducing size, weight and power requirements. Incre-



Rich Mattox



Rich Mattox

Top, a Warfighter Information Network-Tactical (WIN-T) Increment 2 Point of Presence platform is shown during the WIN-T Increment 2 Engineering Field Test held in December 2008 at Fort Huachuca, Ariz. Bottom, a convoy of future on-the-move platforms for the WIN-T Increment 2 includes two point-of-presence vehicles, on the left, during the WIN-T Increment 2 Engineering Field Test.

ment 4 represents the last of the development program elements, providing technology insertions that will enable enhanced satellite communications."

With Increment 1 now providing more than half of the Army with a high-capacity broadband network to support commanders while in static command posts, Weiss reiterated that the key attribute of Increment 2 "is that it will provide initial implementations of all of the intended benefits of the WIN-T network—including mobility—thereby freeing commanders at virtually every level of command to move about the battlefield for any mission, regardless of the echelon of command or the fluidity of the situation."

Increment 2 limited user testing (LUT), conducted in March, allowed soldiers from the U.S. Army's 4th Brigade, 2nd Infantry Division, at Fort Lewis, Wash., and the 3rd Infantry Division at Fort Stewart, Ga., to run mobile mission scenarios across a 3,000-square-mile area while the network maintained connectivity with their vehicles.

Noting that the soldiers "used the WIN-T network operating at every level of command," Weiss said, "Both units remarked that they would take the WIN-T system to war with them today. Successful completion of LUT paves the way for the Army to approve low-rate initial production of the WIN-T Increment 2 system. Upon final approval, fielding of the new equipment will begin in late 2010."

Looking beyond Increment 2's initial mobile networking for Army divisions, brigade combat teams, battalions and companies, Weiss said that "Increment 3 provides increased network reliability and two to four times more network capacity. In addition, Increment 3 adds airborne relays to the network that increase network reliability and improve network automation, helping to keep mobile and dispersed forces connected and reducing the network-management burden on signal corps soldiers.



Rich Mattox

CW5 Leslie Cornwall, left, and MAJ Marcus Odum, Training and Doctrine Command capabilities manager for networks and services, examine WIN-T equipment during the WIN-T Increment 2 Engineering Field Test at Fort Huachcuca.

"Among its advantages, Increment 3 delivers smaller and more tightly integrated communications and networking hardware that embeds broadband networking capability inside commanders' vehicles. WIN-T is a key deliverable for the Army's new Brigade Combat Team Modernization strategy, providing a thickening of the network through additional mobile nodes and an airborne line-of-sight radio relay to make the connectivity more reliable. Increment 3 also improves on the network automation software needed to keep networking gear properly configured. This is so brigade commanders have the same benefits of mobile, real-time information exchange and collaboration that exist today in the nonmilitary wireless world."

Low-rate initial production for Increment 3 is currently slated for 2011. Following final approval, Increment 3 will enter the field in 2012.

Reflecting on the significance of the program to today's warfighters, Weiss noted, "A reliable network is currently more accessible to the average American than to the American soldier. WIN-T creates an always-on, anytime, anyplace network for military users—from senior commanders to the soldier at the forward edge—with provisions for voice, video, data, chat and, most importantly, battle command on the move. The true benefits of networking, collaboration and decision making are realized through Increment 3 of WIN-T, giving military users the network capacity civilians take for granted in today's world."

"Consider the modern executive," Weiss said. "A critical off-site meeting calls him or her away from the office. Setting off for the 20-minute ride to the meeting, the business leader programs the global positioning system (GPS) to determine the best route to the final destination. En route, a cell-phone call comes in, alerting the executive that the meeting has been pushed back. The extra time is fortunate as there is now opportunity to coordinate a discussion with two content experts. The executive initiates a Bluetooth-enabled three-way call to the collaborators who agree to a quick face-to-face meeting in close proximity to the meeting location. Reprogramming the GPS, the executive makes the side meeting and is back on the road in short order. Having spent time gaining more information through collaboration, the executive is better informed and ready for the critical meeting, with no downside for having conducted business in a mobile environment. The users in this environment have no need to know—nor do they care—how their network operates. They know it is reliable and that it suits their mission. The American soldier deserves no less."

AUSA Sustaining Member Profile

SprayCool®

Corporate Structure—Founded: 1988. President and CEO: Matt Gerber. Headquarters: 2218 North Molter Road, Liberty Lake, WA 99019. Telephone: 509-232-2600. Web site: www.spraycool.com.

SprayCool is a recognized leader in thermal management products for electronics deployed in both military aircraft and ground vehicle applications. Unique for its patented two-phase cooling technology, SprayCool has allowed military customers to expand their choice of electronics to be deployed in harsh environments and works through leading integrators—including Northrop Grumman, Sierra Nevada Corporation (SNC) and Lockheed Martin—to meet demanding electronics protection and cooling requirements for multiplatform-based command and control, sensor processing and electronic warfare (EW) applications.

Technology. What makes SprayCool's patented direct-spray technology so unique is that it sprays a fine mist of noncorrosive, nonconductive, nonflammable liquid that evaporates and cools electronics on contact. The process continuously cycles within a sealed, closed-loop system. SprayCool-sealed enclosures isolate electronics from harsh temperatures and environments, such as the fine-sand conditions U.S. troops are experiencing in Iraq and Afghanistan. They have been adopted by the U.S. Army and U.S. Air Force as an effective alternative for specific C4ISR applications, including radar processing, command and control, Signals Intelligence, and EW systems. Electronics such as those enabled in SNC's helicopter radar application are environmentally sealed and enabled by SprayCool's unique cooling technology and enclosures. Often, as in the case of unmanned aerial vehicle (UAV) applications, the SprayCool enclosures are in small, unconditioned spaces—whether on the tarmac or at altitudes of up to 70,000 feet.



SprayCool

SprayCool enclosure and technology benefits include:

- Ability to deploy commercial-grade electronics in a wide range of platform environments, without a dedicated external ECS/air conditioning system.
- Flexibility to mix both commercial-grade off-the-shelf and custom cards in the same enclosure, resulting in lower cost, state-of-the-art performance, and shortened electronics sourcing and development cycles.
- Reduced size, weight, system power and cost, due to the efficiency of the cooling solution.
- Reduced life-cycle costs by enabling thermal headroom for future electronics upgrades of commercial-grade electronics.
- Increased reliability through environmental isolation, more uniform temperature and lower junction temperature.
- Elimination of thermal ceiling for future electronics upgrade, due to inherent flexibility and headroom of direct-spray cooling versus air or conduction.

From ground mobile command-and-control applications to digital receivers in UAVs, SprayCool solutions have expanded the array of selectable electronics that can be deployed in harsh environments. SprayCool has a fully scalable line of sealed, direct-spray VME/cPCI/VXS/VPX-type enclosures, available in 3U and 6U configurations of four to more than 21 slots. The company also provides modular cooling kits for a variety of other electronic platforms, including sealed transit cases, 19-inch rack mount and other high-power system solutions. SprayCool modular solutions deliver localized cooling of hot spots with low development costs by using standard components specifically designed and tested for harsh military environments, making them especially well suited for U.S. Army applications, including radar processing, Signals Intelligence, EW and power electronics applications.

U.S. Army Program Adoption. SprayCool has worked on several programs for the U.S. Army, starting in 2007 with the medium extended air defense system (MEADS) program. This was a transatlantic cooperative effort between the United States, Germany and Italy to develop an air and missile defense system that is tactically mobile and transportable, designed to replace Patriot systems in the United States and Germany and the Nike Hercules system in Italy. Lockheed Martin selected SprayCool technology to cool electronics in the truck-mounted surveillance radar and fire-control radar, stating that it "enables MEADS to efficiently operate commercial off-the-shelf as well as very high-end electronics densely packed on a mobile radar platform."

SprayCool's reach into U.S. Army applications also includes airborne applications for both helicopters and UAVs. Installed on a UH-60 Black Hawk helicopter, SprayCool enclosures have completed a series of flight tests for SNC's helicopter autonomous landing system. The SprayCool enclosure protects sensitive commercial-grade radar electronics and is mounted to the front of the helicopter, while providing complete environmental isolation in harsh sand, dust, vibration and even brownout conditions, thanks to its fully sealed, closed-loop design.

SprayCool enclosures were also selected by Lockheed Martin for the U.S. Army's tactical reconnaissance and counterconcealment enabled radar program to house the low-frequency synthetic aperture radar systems being installed on the Warrior UAVs.

Reviews

The Nexus of the WWII Western Alliance Examined

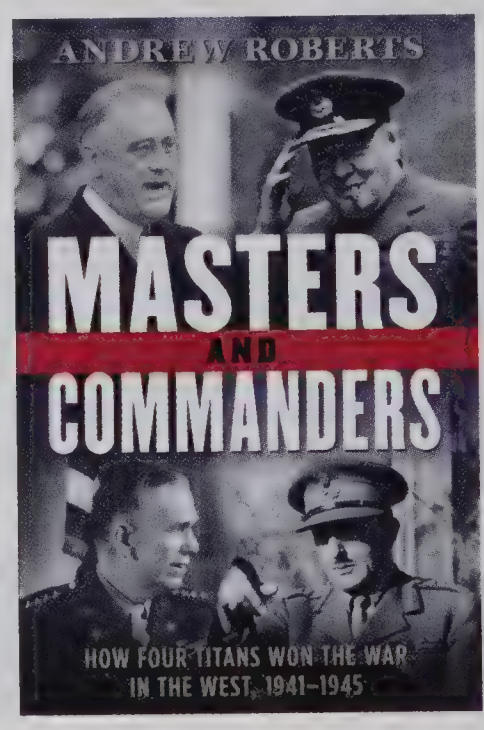
Masters and Commanders: How Four Titans Won the War in the West, 1941–1945. *Andrew Roberts. Harper. 720 pages; maps; black-and-white photographs; index; $35.*

By COL Cole C. Kingseed
U.S. Army retired

By its nature, the term *grand strategy* implies the integration of political, economic and military means to achieve the long-term interests of the state in peace and war. Within the Western alliance during World War II, the formulation of grand strategy remained the purview of American President Franklin D. Roosevelt, British Prime Minister Winston Churchill and their principal senior military advisers, U.S. Army Chief of Staff GEN George C. Marshall and Chief of the Imperial General Staff (CIGS) Field Marshal Alan Brooke. In *Masters and Commanders,* historian Andrew Roberts explores how these two politicians and two generals "ultimately crafted the victories that were to come" during the final three years of the European war.

Roberts, whom *The Economist* calls "Britain's finest contemporary military historian," draws upon newly released verbatim diaries of Churchill's war cabinet meetings and other contemporary accounts to reconstruct the lively discussions that took place between the American and British strategists, beginning with their initial meeting in Roosevelt's Oval Office on June 21, 1942. In all, the four principal Western strategists met seven times over the course of the war—twice in Washington, D.C., and in Quebec, and once in Casablanca, Tehran and Yalta.

Roberts divides his analysis of the four "titans" into three sections, entitled "Enchantment," "Engagement" and "Estrangement." These sections illustrate the evolution of the discussions among the senior members of the Western alliance in their efforts to reconcile national interests with coalition realities in the struggle to defeat Nazi Germany. Roberts speculates that a different quartet might have made different decisions, but he believes it unlikely that any would have significantly shortened the war.



What makes *Masters and Commanders* so interesting, though *commanders* is a bit of a misnomer since neither Marshall nor Brooke was really a commander in the strictest sense, is the deft manner in which Roberts weaves his narrative. The most intriguing relationship that Roberts examines is between the two military advisors. Brooke initially underestimated Marshall's strategic grasp of the intricacies of waging global war, and it was not until late 1943 that Brooke reluctantly accepted Operation Overlord, the invasion of Western Europe, as absolutely necessary to be conducted in the summer of 1944. For his part, Marshall never developed the intimate bond with Brooke that he did with Brooke's predecessor as CIGS, Sir John Dill.

The interaction between Roosevelt and Churchill is more thoroughly analyzed in Jon Meacham's *Franklin and Winston: An Intimate Portrait of an Epic Friendship*. So, too, is Churchill's relationship with Brooke in Carlo D'Este's *Warlord: A Life of Winston Churchill at War, 1874–1945,* though Roberts meticulously chronicles Brooke's chagrin at not receiving command of Overlord after Churchill repeatedly hinted that Brooke would receive command of the eventual cross-Channel invasion. Brooke's dismay at what he termed shabby treatment from the prime minister was still evident when Brooke published his own memoirs, *The Turn of the Tide,* in 1957.

Success in the formulation of grand strategy largely resulted from the ad hoc alliances formed between the senior political leaders and their primary military advisors. According to Roberts, "Each of the four titans was strong willed, tough minded and certain that he knew the best way to win the war. Yet, in order to get his strategy adopted, each needed to ensure that he could persuade at least two of the other three." Frequently this arrangement found expression in taking up positions according to nationality, but sometimes alliances were formed across both professional and national lines.

The ultimate arbiter, posits Roberts, was Roosevelt, who sided with the British in 1942 and 1943, but then allied himself with Marshall for the cross-Channel assault in 1944. Of the four masters and commanders who shaped the Western alliance, "the man who most influenced the course of the war was the one who openly acknowledged that he knew the least about grand strategy: Franklin Delano Roosevelt." This was particularly true after 1943, when the preponderance of military and economic resources of the United States far outweighed the resources that the British Empire could allocate to the war in Europe.

Roberts concludes that it was fortunate that the tipping point in influence between America and Britain occurred at much the same time that a cross

Channel attack was at last genuinely viable. Roberts quotes historian Brian Bond, who posited that "Brooke and his colleagues got their way to a remarkable extent in 1942 and 1943," and goes on to say that "it was just as well at that stage in the war," but Marshall, "who was wrong to press for the invasion of France in 1942 and 1943, was absolutely right to demand one for 1944."

In the final analysis, Roberts opines that the decisions made by Hitler and Stalin "far more profoundly influenced the outcome [of the war] than those of any Briton or American." Both Hitler and Stalin imposed their versions of grand strategy on their generals throughout the war. In contrast, the strategies of the Allies were exhaustively argued within the Combined Chiefs of Staff long before they were even capable of being placed before the politicians. It was within these corridors that Marshall and Brooke contributed so mightily to Allied victory.

*COL **Cole C. Kingseed**, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.*

Renaming War Once More

War 2.0: Irregular Warfare in the Information Age. *Thomas Rid and Marc Hecker. Praeger Security International. 272 pages; index; $49.95.*

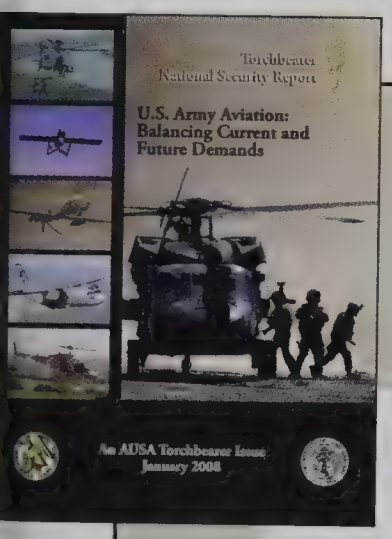
By James Jay Carafano

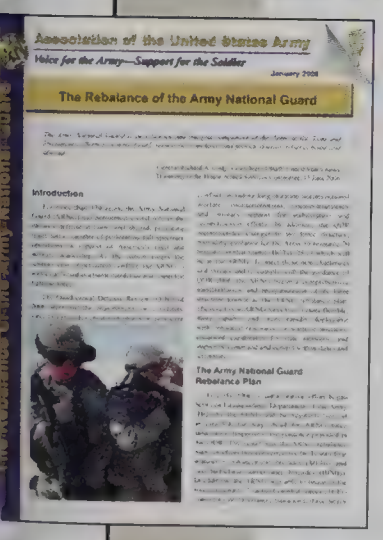
Two veterans of the international think-tank community, Thomas Rid and Marc Hecker, have interwoven several themes to offer their vision of modern conflict. *War 2.0: Irregular Warfare in the Information Age* strings together the topics of insurgencies, terrorism, social networking (the conglomeration of online tools from Twitter on down, often called Web 2.0) and information warfare. All of these topics converge in cyberspace, which for Rid and Hecker is the new center of gravity for political violence and conflict.

War 2.0 includes a smattering of history—what the authors call War 1.0. They then contrast the past with a survey of contemporary events to describe how conflict in the modern age is different—their War 2.0. In short, they argue that the Internet offers an asymmetry that nonstate actors can exploit—the web evens the odds in competing with states.

The heart of *War 2.0*, however, is a series of case studies that delve into how states and nonstates act online. The states assessed include the United States, Great Britain and Israel. The nonstates are the Taliban, al Qaeda and Hezbollah.

War 2.0 does chronicle much of what is happening online these days. That story, however, can be found in lots of places, and in many cases, it is told far





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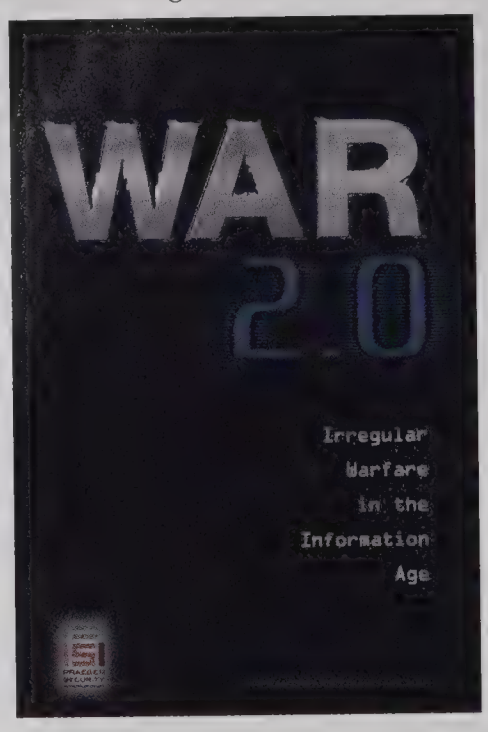
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better elsewhere. For understanding social networking, for example, a far superior book is *Here Comes Everybody: The Power of Organizing Without Organizations* by Clay Shirky. Shirky does a better job than most of making sense out of what nice and not-so-nice people are doing with social networking. In addition, the story of Web 2.0 and conflict is constantly gaining new material—*what* we think is outdated almost as soon as we think it. The experiences of the Iranian election protests, for example, are an important new chapter in the story, but folks were just going to the polls in Tehran as *War 2.0* was landing on the shelf.

Beyond surveying what is taking place on the web, what Rid and Hecker have to offer is problematic: a reconceptualization of conflict that lacks much intellectual heft. To say the nature of modern war is changing is to say almost nothing. The conduct of war is always evolving to accommodate changes in how humans compete. Technology, cultural norms, social conventions—they move on. And there is always a cottage industry for slapping a new name on war. The term of art today is *hybrid wars*. All this is silliness and advertising.



Arguing for significant shifts in the nature of conflict requires grounding in a theory of war—some kind of explanatory model that's powerful enough to explain behaviors and predict future outcomes. *War 2.0* falls seriously short on that count.

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The case studies are a little more helpful—but not much. Looking at how social networking affects the conduct of conflict is an important question. The first wave of writings on war in the Information Age overwhelmingly focused on how militaries would use computers to network themselves and gain "situational" awareness. Now, it's rightly time to look at what happens when everybody else does that.

In that regard, the notion of conducting case studies is a good one. A series of case studies is great for establishing clear patterns or identifying unique situations.

Unfortunately, the case studies chosen for looking at conflict in the Information Age "up close" are pretty uninteresting. Rid and Hecker opt for easy targets that don't really give a feel for the depth and breadth of what is occurring online.

Comparatively speaking, the U.S., British and Israeli militaries have more in common than those of most nations. Looking at three of the same is boring. Even Israel is not much of an outlier—though it is a Middle Eastern country it has some of the highest levels of Internet use in the world. Online, in fact Israel looks like a smaller America. The one country that really ought to be in the survey is China, a huge country with massive use of the Internet and massive control of that use. Iran is interesting as well, with lower Internet use and lots of online controls, but also a lively cyberspace due in part to a web-savvy Iranian diaspora. Likewise the nonstate case studies are three of a kind. More interesting would have been some contrasting groups, such as nongovernmental groups battling extremism online.

With little grounding in a compelling theory and a lazy collection of case studies, the book falls short of doing anything really meaty and interesting.

It is not surprising that the conclusions and recommendations are brief, sophomoric and simplistic.

James Jay Carafano *is a senior fellow at The Heritage Foundation and the author of* G.I. Ingenuity: Improvisation, Technology and Winning World War II.



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Historically Speaking

The Plains of Abraham at 250

By BG John S. Brown
U.S. Army retired

September 13th marks the 250th anniversary of the Battle of the Plains of Abraham, the decisive event leading to the fall of Quebec and eventual British victory in the French and Indian War (also called the Seven Years' War). Nothing less than the fate of a continent was at stake—a struggle to be decided between two powerful nation-states, very different colonial philosophies and diverse long-term prospects.

The British Colonies in North America were populous, prosperous and chaotic knockoffs of the Old Country. No particular effort had gone into screening immigrants. Indeed, many viewed the Colonies as an ideal depository for quirky religious groups, political casualties, redeemable convicts and the indentured poor. A sizeable proportion of women went into this mix, and the population grew dramatically as economies diversified among subsistence agriculture, commercial agriculture, cottage industries, fishing, shipping and commerce. Appropriated Dutch New York and Swedish Delaware increased ethnic diversity and collaterally increased tolerance for settlers who came from other-than-English stock, as did requirements for labor in these expanding economies. Native Americans (hereafter *Indians*) were generally pushed beyond the physical margins of the land-hungry British Colonies. Black slaves were imported to assist with the grueling demands of commercial agriculture. By 1750, more than a million white settlers clustered along the Atlantic seaboard, complemented by the labor of 200,000 blacks.

New France, on the other hand, was better designed to serve the corporate interests of France's monarchy and privileged elite. It was an extractive commercial emporium, trading widely with the Indians for furs and other portable wealth but not developing much agriculture or other settled industries. Success in this area of commerce depended on good relations with the Indians, who proved far more likely to become allies of the French than of the British, since the former put so little pressure on their lands. Good relations often included intermarriage. To minimize friction, religious heretics, political dissidents and the otherwise unfit were unwelcome in New France. French Huguenots were denied the option of settling there and instead settled in the British-owned Colonies.

New France had a governor who actually ran things continent-wide, whereas multiple appointees passing for governors in the British Colonies had limited venues, frequent quarrels with local legislatures and plenty of second-guessing from London. New France may have been better organized than the factious British Colonies, but it was far less populous—approximately 65,000 Frenchmen scattered in a wide arc from the Gulf of Saint Lawrence through th



The bold tactics of British Gen. James Wolfe, mortally wounded on the Plains of Abraham during the siege of Quebec in 1759, led to the fall of the city and Anglo-American expansion in New France. (Engraving by William Woolet, 1776, after a painting by Benjamin West)

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PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

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Great Lakes and Mississippi Valley to the Gulf of Mexico.

British Colonial population size did not readily translate into military power. Militiamen could be potent locally but did not have much capacity to project power. Expeditionary combat required money. The British Colonies were prosperous but too chaotic and minimally taxed to generate reliable funding streams. New France was better off in that regard, but both major powers relied upon revenues, fleets and regular soldiers from the home country to pursue major operations in the New World. The French also relied heavily on Native American allies.

Hostilities commenced in 1754 and went poorly for the British at first. A disastrous defeat on the Monongahela River drove them out of the Ohio River Valley, their expedition against Fort Niagara fizzled, and seesaw warfare along the Lake Champlain-Lake George water route ended in the fall of Fort William Henry and the massacre of much of its garrison in 1757. Perhaps worse, emboldened Indians, at times in concert with the French and at times not, ravaged the length of the frontier. Thousands of settlers were killed and tens of thousands fled in terror.

Reeling from such defeats, Britain's forceful new prime minister, William Pitt, resolved to invest heavily enough in the North American fighting to win it. He built up a force of 20,000 regulars potentially reinforced by 30,000 expedition-worthy militia and supported by an ample fleet. The new force combined traditional musketry and bayonet tactics with the looser light infantry sniping of the frontier. Within a year the British had captured the strategic Atlantic fortress of Louisbourg, reestablished themselves in the Ohio River Valley and captured Fort Frontenac on Lake Ontario.

Such victories would remain peripheral and indecisive, however, as long as the twin bastions of Quebec and Montreal guarded the Canadian heartland along the Saint Lawrence River. New France was an entrepot, not a homogenous realm subject to customary rules of conquest. As long as it could be resupplied—even if sporadically—from Europe and maintained active alliances with the Indians, it would be an indefinite barrier to British ambitions in the New World. With respect to the Atlantic approach, the fortress of Quebec, perched on high bluffs dominating the outlet of the Saint Lawrence, was the key terrain.

In June 1759, young British Gen. James Wolfe landed near Quebec with around 9,000 men, mostly regulars. He was opposed by the Marquis Louis-Joseph de Montcalm with approximately 14,000 men, five regular battalions vastly reinforced by militia and Indians. Montcalm wisely refused open battle with the fabled British musketry. Wolfe's numerous attempts to force positions or gain maneuver advantage failed for more than two months. Time was running out—winter ice would trap Wolfe's supporting fleet, local supplies were negligible, and wintering in the open amid Indian and militia depredations could be disastrous. After considerable reconnaissance and some deception, Wolfe committed to a daring stroke. During the night of September 12–13, the bulk of his force landed beneath the bluffs north of Quebec, followed a battalion of provincial rangers up a precipitous trail they had hastily seized, and formed up in line of battle on the plateau descending into the city—the Plains of Abraham. Wolfe was between French forces in Quebec and a sizeable French column that had been dispatched to monitor one of his deception efforts. Montcalm, surprised but not cowed, rushed out of the city to attack with an approximately equal force. The battlefield favored the drilled musketry at which the British excelled, and they employed it at close quarters with horrific effect. Both Wolfe and Montcalm were mortally wounded, but Wolfe's subordinates were up to the tasks of finishing the fight, seizing the city and sustaining the campaign. The French attempted to retake Quebec before the British fleet could return the following spring, but failed. A British naval victory at far-off Quiberon Bay crippled French naval power and further isolated New France. Montreal fell to converging British columns in September 1760.

Wolfe's bold stroke shaped a continent. The French and Indian War presented the last clear chance that Native Americans had to contain Anglo-American expansion. Supported by such a great power as France, they could have contested the Appalachian crossings indefinitely. Once fertile, self-replicating Anglo-American agricultural communities were established in the Ohio River Valley, however, the die was cast. The frontier crisis had forced such transcolonial cooperative efforts as the Albany Conference, and embattled colonists increasingly used the word *Americans* to identify themselves as a unique people. American officers such as COL George Washington went to school on the relative advantages of British and colonial fighting techniques. Ironically, the British tried to reestablish the revenue-producing French commercial emporium in the trans-Appalachian west; this was soon swept away by the bumptious American mixed economic culture that was their truer legacy. ★

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: Army Transformation 1989–2005, *is forthcoming.*

Recommended Reading:

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Fuller, J.F.C., *A Military History of the Western World, Volume II* (New York: Da Capo Press, 1987)

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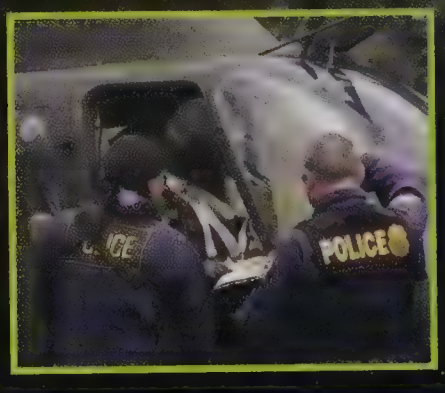
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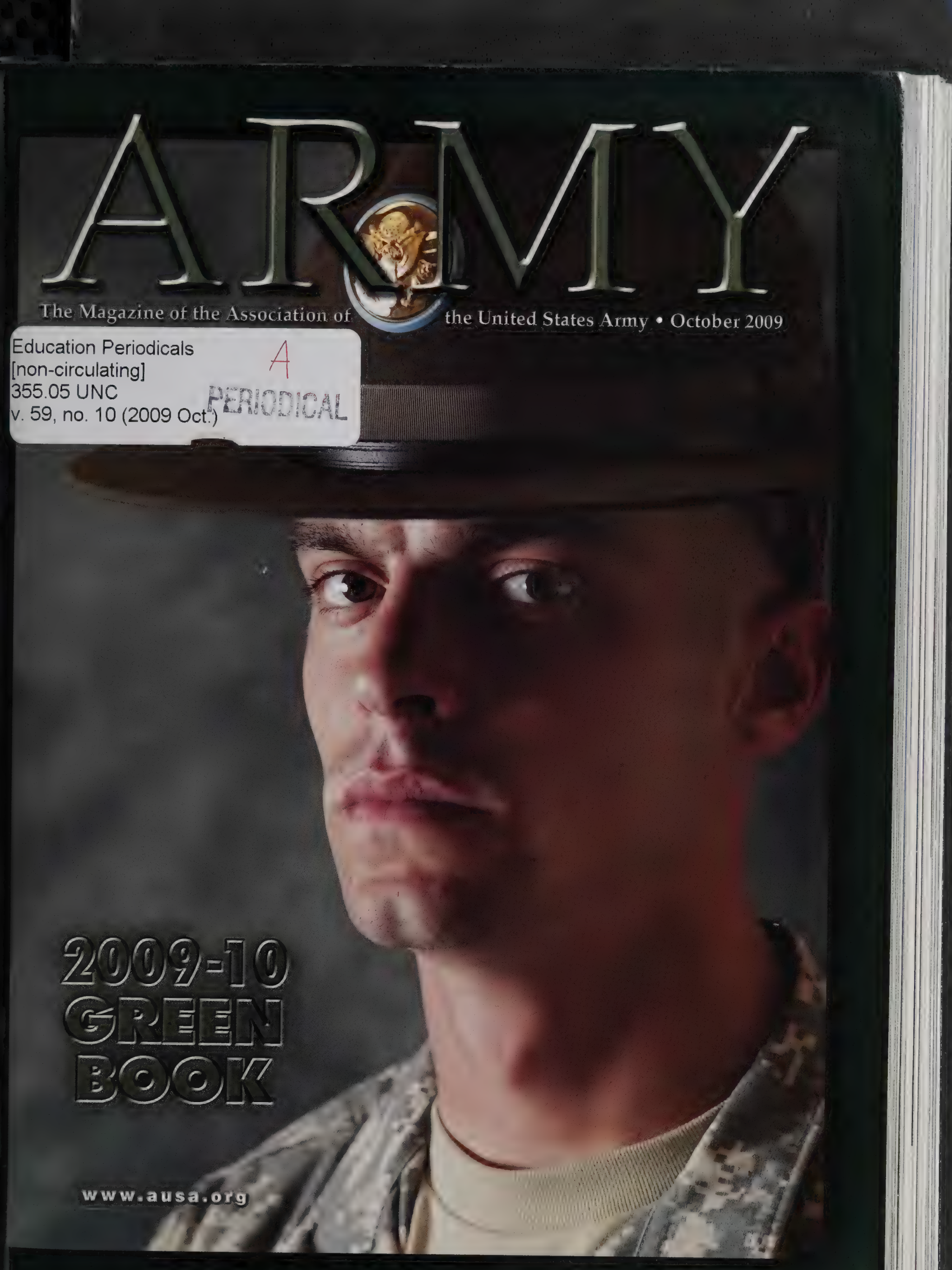
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The Year of the NCO

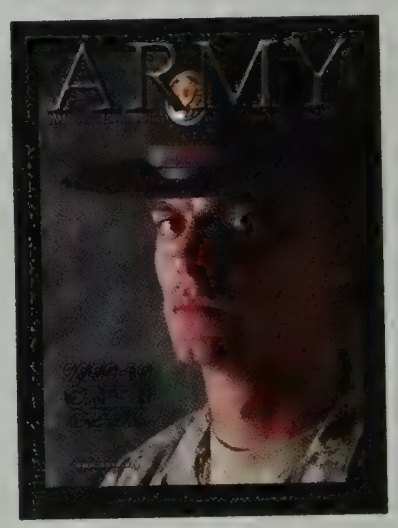
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This Month's Cover

In honor of the U.S. Army's Year of the NCO, the 2009–10 ARMY Magazine *Green Book* cover features SSG Michael Johnston, the U.S. Army Drill Sergeant of the Year. SSG Johnston, representing Fort Benning, Ga., was selected as the Army's top drill sergeant for 2009 during the U.S. Army Training and Doctrine Command (TRADOC) annual competition. (SSG Joshua Marshall, representing the 95th Division, was selected as the 2009 U.S. Army Reserve Drill Sergeant of the Year.) At the time of his selection, SSG Johnston was assigned to Company C, 2nd Battalion, 58th Infantry Regiment, 192nd Infantry Brigade. He will spend a year at the TRADOC headquarters, travelling to posts to observe training and advising the TRADOC command sergeant major. SSG Johnston, from Lincoln, Neb., had been in the Army for more than seven years when he was selected. He has completed two combat tours in Afghanistan as an infantryman in the 10th Mountain Division (Light Infantry). For their accomplishments, SSG Johnston and SSG Marshall will receive the Stephen Ailes Award and the GEN Ralph E. Haines Jr. Award, respectively, at the 2009 AUSA Annual Meeting and Exposition's Eisenhower Luncheon in Washington, D.C., in October.

(Cover photograph by Dennis Steele, ARMY Magazine)

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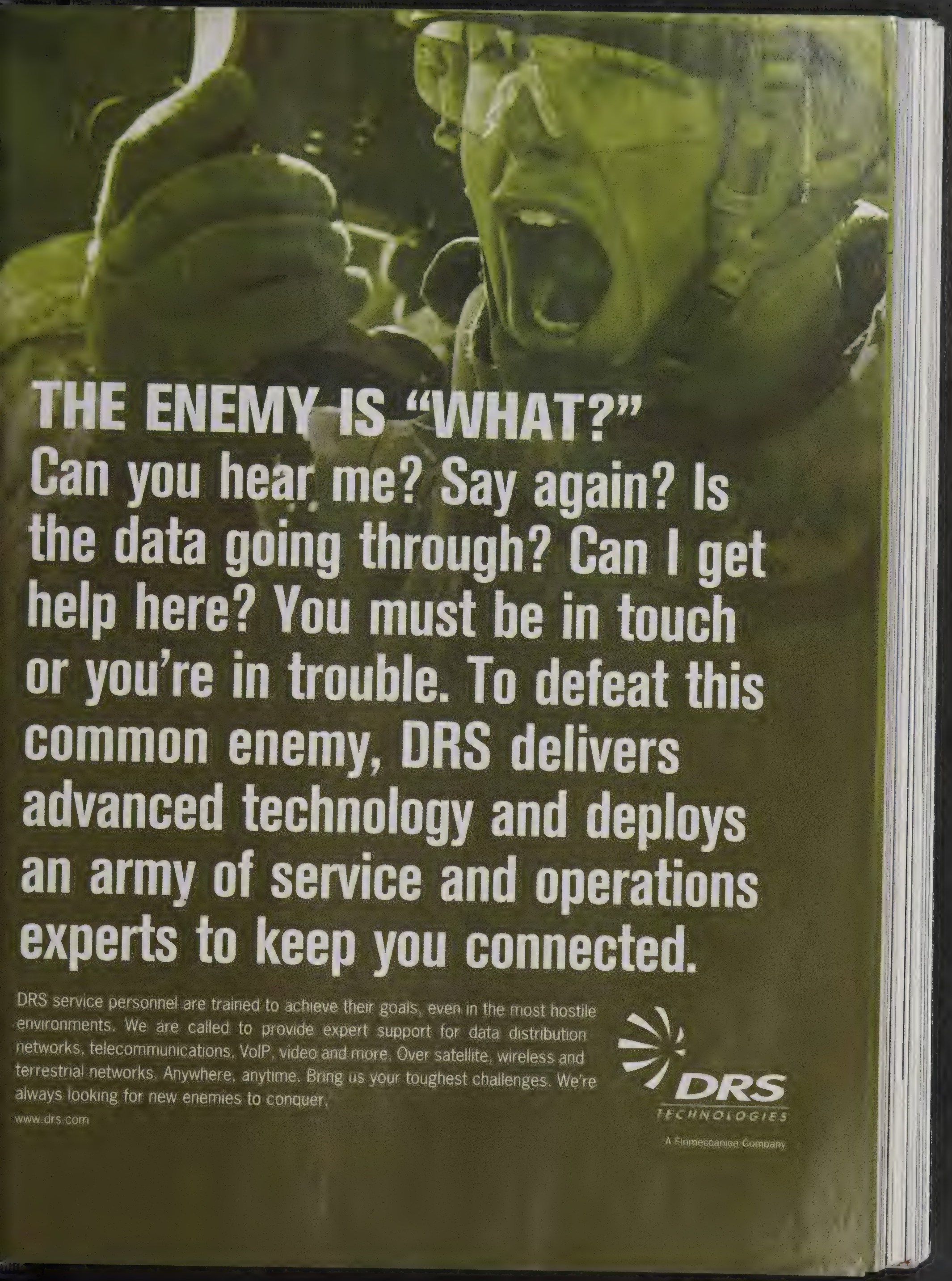
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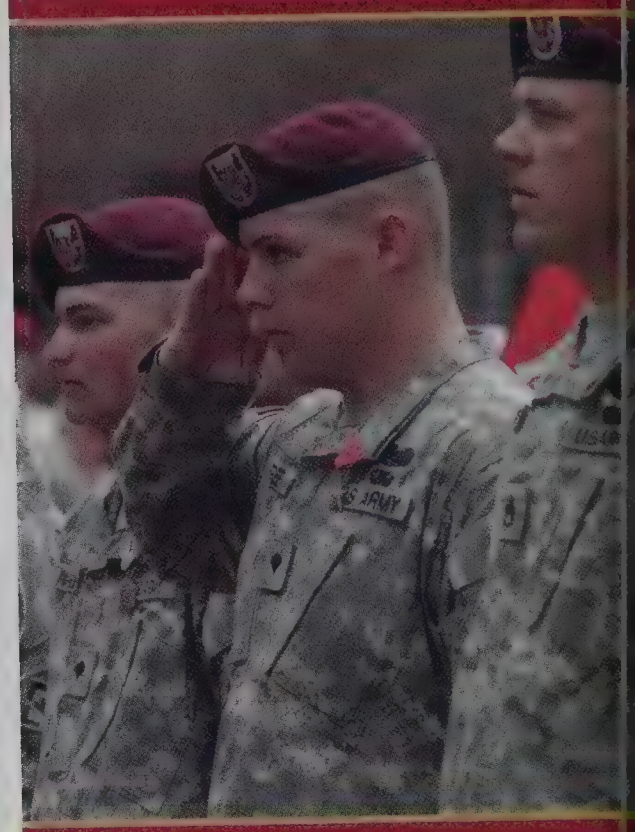
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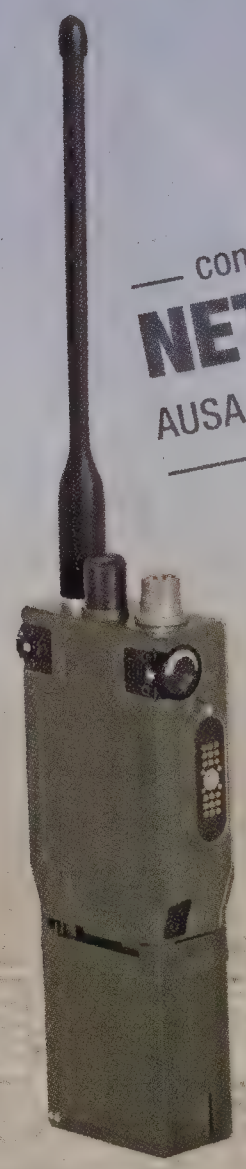
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Two Centuries of Leadership And Selfless Service— The Army NCO

By GEN Gordon R. Sullivan
U.S. Army retired
AUSA President

"The goal of the corps of NCOs, whose duty is the day-to-day business of running the Army so the officer corps has time to command it, is to continue to improve our Army at every turn. We want to leave it better than we found it."

—SMA William G. Bainbridge

I have been the beneficiary of wisdom and advice from Army noncommissioned officers for more than 50 years. I have had the privilege of being shaped, molded, trained and advised by the magnificent Army Noncommissioned Officer Corps from my cadet days at Norwich University up to the present, as I work with our current Sergeant Major of the Army and our tremendous NCO staff members at AUSA national headquarters.

During my years as a young officer, I worked





Medal of Honor awardees reflect decades of NCOs' selfless service. Top, left to right: SGT Alvin C. York, World War I; SGT Audie Murphy, World War II; SGT Cornelius H. Charlton, Korea. Center, left to right: SFC Webster Anderson, Vietnam; MSG Gary Ivan Gordon and SFC Randall D. Shughart, Mogadishu, Somalia. Bottom, left to right: SFC Paul Ray Smith, Iraq; SPC Ross McGinnis, Iraq; then-SSG Jared C. Monti, Afghanistan.

with many outstanding NCOs: 1SG Otis C. Dillon, 1/66th Armor, when I was a second lieutenant at Fort Hood, Texas; SFC James Allen, A Company, 3/40 Armor, when I was in Korea; CSM Doug Horn, 3/32nd Armor, 3rd Armored Division, in Germany; CSM Jimmie Johnson, 4/73 Armor, Böblingen, Germany; CSM Bob Lindsay, 1st Brigade, 3rd Armored Division, in Germany; and CSM Julio Diaz, 1st Infantry Division, at Fort Riley, Kan. All of these men got me started off on the right foot (when not marching) in leading, training and caring for our soldiers. Each "noncom," a combat veteran, kept me on the right azimuth. During my tenure as Army Chief of Staff, our Army was superbly and professionally served by my strong right arm, SMA Richard A. Kidd.

It was at the full honors funeral for SMA William G. Bainbridge in Arlington National Cemetery that I had a chance to reflect on the immense contributions in leadership and selfless service that our NCO Corps has given our Army and our nation.

SGT Alvin York, who gained national fame and earned the Medal of Honor for his resolute fight against great odds in the Argonne Forest in 1918; SGT Audie Murphy, who was wounded three times during World War II while earning the Medal of Honor, the Distinguished Service Cross, two Silver Stars and a battlefield commission; SGT Cornelius Charlton, who assumed command when his platoon leader was wounded and earned the Medal of Honor by leading his platoon to victory near Chipo-Ri in Korea; SFC Webster Anderson, who led his soldiers in a successful defense of their firebase in Vietnam in spite of serious wounds, earning the Medal of Honor; MSG Gary Gordon and SFC Randall Shughart, who volunteered to secure a helicopter crash site in Mogadishu and valiantly protected four critically wounded soldiers, giving their lives and earning the Medal of Honor; and SFC Paul Smith, whose selfless leadership in repelling an enemy attack on his unit's position near the Baghdad international airport cost him his life, earned the Medal of Honor, saved the lives of many other soldiers, and carried on the best tradition of noncommissioned officer leadership and professionalism. And you can be sure it was an Army NCO—drill sergeant, platoon sergeant or squad leader—who instilled Army Values as taught by the NCO

"The choice of noncommissioned officers is an object of the greatest importance: The order and discipline of a regiment depends so much upon their behavior, that too much care cannot be taken in preferring none to that trust but those who by their merit and good conduct are entitled to it. … It being on the noncommissioned officers that the discipline and order of a company in a great measure depend, they cannot be too circumspect in their behavior towards the men, by treating them with mildness, and at the same time obliging every one to do his duty. By avoiding too great familiarity with the men, they will not only gain their love and confidence, but be treated with a proper respect, whereas by a contrary conduct they forfeit all regard, and their authority becomes despised."

—Baron von Steuben

Education System into the soul of Medal of Honor recipient SPC Ross McGinnis, 1st Battalion, 26th Infantry Regiment, 2nd Brigade Combat Team, 1st Infantry Division, who lost his life in Iraq while protecting his crew. SFC Jared C. Monti, 3rd Squadron, 71st Cavalry, 3rd Brigade Combat Team, 10th Mountain Division, sacrificed his life in an effort to save a comrade in Afghanistan in 2006; this September he became the first soldier to receive the Medal of Honor for actions in Afghanistan. Each NCO on this roll of honor has lived all aspects of the NCO Creed.

As your AUSA President, I am pleased with the continuing leadership and energy within today's volunteer NCO ranks across AUSA—from the Council of Trustees to chapter presidents and officers. Although most of our NCO leaders are retired, their continued contributions prove that the principles of the NCO Creed are transferable to civilian life. Thank you. Since we are celebrating the Year of the NCO, our NCO and Soldier Programs directorate—headed by CSM Jimmie Spencer, U.S. Army retired, and CSM Don Thomas, U.S. Army retired—has led the way in ideas, innovations and programs to support the Army. I am particularly proud of the 2009 editions of *The Sergeants Major of the Army: On Leadership and the Profession of Arms* and *U.S. Army Campaign Streamers: The Colors of Courage Since 1775*, both updated by the Institute of Land Warfare in honor of our great NCOs across the Army.

The strength of AUSA as the Voice for the Army—Support for the Soldier lies in our individual members, their volunteer leaders and our more than 120 chapters worldwide. As I've traveled around the Army this past year, I've been impressed with the quality and variety of activities that our grassroots chapters execute in programs for our soldiers and families. Departure and Welcome Home ceremonies; support for wounded warriors and the warrior transition units; support to Recruiting Command; and events to recognize our outstanding NCO Corps have all verified that we have the right focus in our mission and vision as an organization. I must compliment director John Davies and his great Regional Activities team for our continued success. In this Year of the NCO, a couple of John's stalwarts are retired SGM Leroy Bussells, retiree and veteran affairs, and retired CSM Mike Levine, chapter affairs. Our chapter activities in support of soldiers and families continue to be valuable and contribute to soldier, family and unit well-being. Their impact on tempering the dwell time for our units and soldiers gets better every day. Our web site, www.ausa.org, accounts for these activities daily. As our chapter leaders well know, CSM Levine keeps everyone up to date on the flow of such significant events through "Leader Links." I am pleased that our two major

The NCO Creed

No one is more professional than I. I am a Noncommissioned Officer, a leader of soldiers. As a Noncommissioned Officer, I realize that I am a member of a time-honored corps, which is known as "The Backbone of the Army." I am proud of the Corps of Noncommissioned Officers and will at all times conduct myself so as to bring credit upon the Corps, the Military Service and my country, regardless of the situation in which I find myself. I will not use my grade or position to attain pleasure, profit, or personal safety.

Competence **is my watchword. My two basic responsibilities will always be uppermost in my mind—accomplishment of my mission and the welfare of my soldiers. I will strive to remain technically and tactically proficient. I am aware of my role as a Noncommissioned Officer. I will fulfill my responsibilities inherent in that role. All soldiers are entitled to outstanding leadership; I will provide that leadership. I know my soldiers, and I will always place their needs above my own. I will communicate consistently with my soldiers and never leave them uninformed. I will be fair and impartial when recommending both rewards and punishment.**

Officers of my unit will have maximum time to accomplish their duties; they will not have to accomplish mine. I will earn their respect and confidence as well as that of my soldiers. I will be loyal to those with whom I serve—seniors, peers and subordinates alike. I will exercise initiative by taking appropriate action in the absence of orders. I will not compromise my integrity, nor my moral courage. I will not forget, nor will I allow my comrades to forget that we are professionals, Noncommissioned Officers, leaders!

"Teamwork, leadership and dedication are the winning formula that has enabled the Army to maintain quality despite turbulent circumstances."

—GEN Gordon R. Sullivan and SMA Richard A. Kidd

annual training events—new chapter president training and emerging chapter leader training—have paid off every year, and both sessions keep improving.

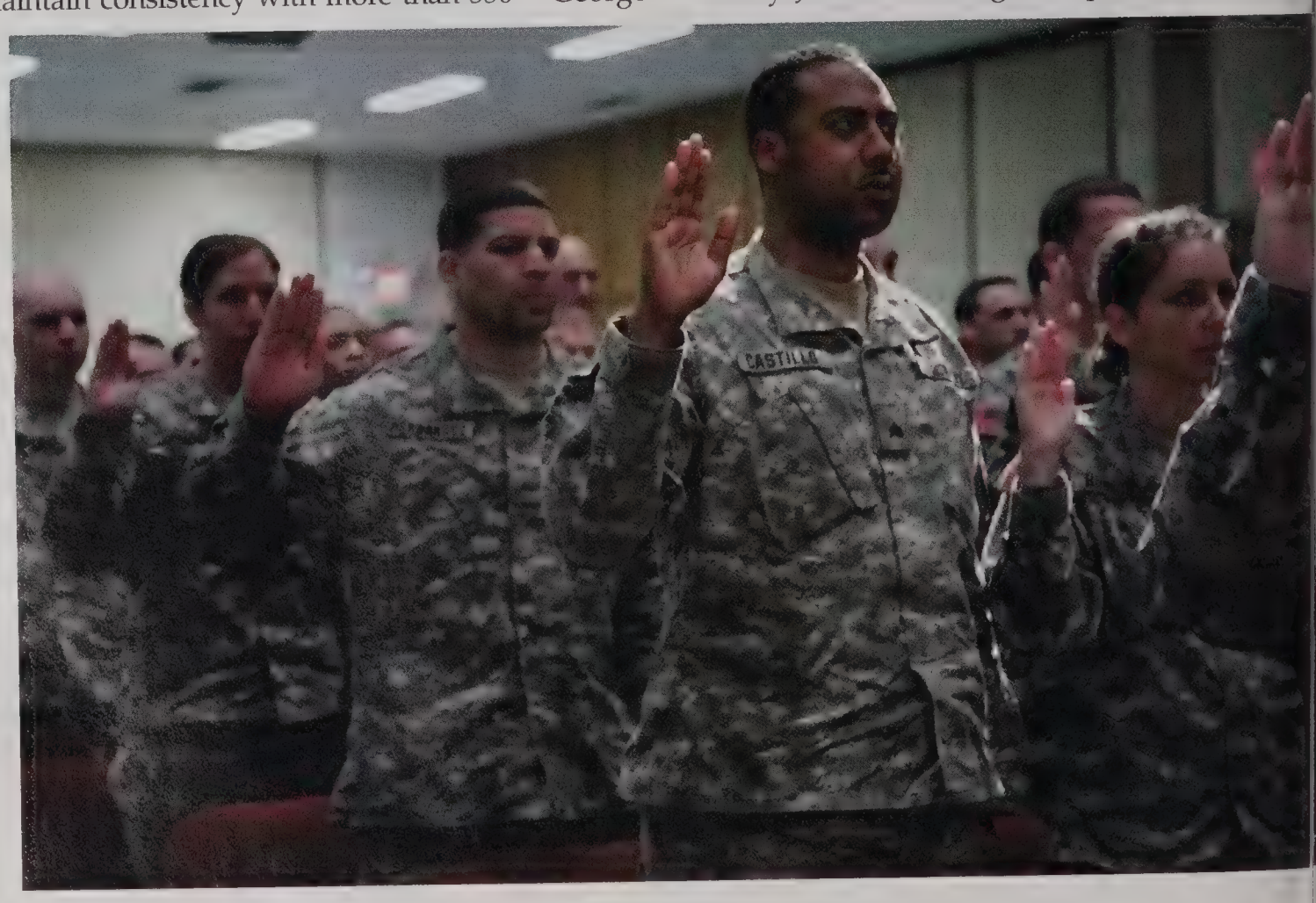
Our Family Programs directorate, led by Sylvia Kidd, keeps growing and adding value across our Army: active, Guard and Reserve. Our successful Family Forums at our Annual Meeting in October have been particularly noteworthy. Each year, we have increased our meeting-room size and still have standing room only. The addition of Family Readiness Group leaders from U.S. Army Forces Command has increased value and energy. Our Volunteer Family of the Year program has also grown in vitality and importance. Thank you for participating—keep the quality nominations coming in.

The continued success of our professional development symposia as forums for Army-industry synergy has been beneficial to the Army and AUSA. Industry Affairs director Michael Scanlan and his team have continued to produce high-quality events that allow this Army-industry partnership to support the Army in its strategic outreach objectives. With each successive Annual Meeting, we continue to build on the success and lessons learned of previous years. The AUSA Annual Meeting continues to be the premiere event of the year for our sustaining members. This is evident in the fact that 100 percent of the available exhibit space for the 2009 meeting was sold by the end of the 2008 meeting. We have been able to maintain consistency with more than 550 sustaining member companies on our rolls during the last two years; to date, there are more than 30 sustaining member companies on the waiting list. We appreciate the support and loyalty from industry membership.

Our publications, both on paper and on the web, play a critical role in our mission as Voice for the Army. *AUSA News* has again won national awards for excellence—congratulations to John Grady and Peter Murphy and their staff. *AUSA News* provides an effective means of telling the Army story for our membership and the public. Mary French and her staff at ARMY Magazine have continued to cover major issues affecting the Army and highlight the extraordinary achievements of NCOs. ARMY recently won two awards in a national competition. Our book program, led by Dr. Roger Cirillo, continues to publish books by prize-winning authors on subjects that are important and relevant to members' professional reading and development. In the past five years, three AUSA books have won national awards.

The Institute of Land Warfare's extensive suite of publications continues to provide timely and insightful information on a wide range of topics related to the Army and national defense. Directors Sandra Daugherty (Programs) and COL George Coan, U.S. Army retired (National Security Studies) lead an outstanding team whose mission is to extend the influence of AUSA by informing and educating not only its members but also local, regional and national leaders and the American people on the critical nature of landpower and the importance of the U.S. Army to the nation.

The Institute of Land Warfare breakfast series got off to a great start this year with Chief of Staff of the Army GEN George W. Casey Jr. as the first guest speaker. The series



Soldiers from New York and New Jersey recite the NCO Creed at Picatinny Arsenal, N.J., in April. The 74 soldiers were inducted into the NCO Corps and recognized for their importance—and that of all noncommissioned officers—in today's Army.

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> *"NCOs are so important [because] they are the recruiters, the first trainers, the first-line leaders, and the NCOs are the ones responsible for the equipment and the training of the soldiers on that equipment."*
>
> —SMA Richard A. Kidd

continues to provide an unparalleled networking opportunity for our sustaining members located in the Washington, D.C., area, as well as Army Staff and congressional staff members. Over the past year, this series has featured a prominent list of speakers including the Chairman of the Joint Chiefs of Staff and GEN Ann E. Dunwoody, commanding general of U.S. Army Materiel Command and the United States' first female four-star general.

The Lemnitzer lecture series, presented by the Institute of Land Warfare and the Army Historical Foundation, provides another opportunity for professional development as authors discuss their recent publications.

Our messages to the nation's leaders in the administration, both White House and Pentagon, as well as on Capitol Hill are more important than ever. The year 2009 is a transition year, with a new President and a new session of Congress beginning their work. The fiscal year (FY) 2010 budget is a transition presidential budget, even though there have been some 50 system kills. The remainder of this calendar year will see formulation of a new and reshaped budget for FY 2011, the development of a new National Security strategy using Quadrennial Defense Review 2010 and the unveiling of a new acquisition strategy for the replacement elements for Future Combat Systems.

AUSA's strategic outreach to Congress for the Army and its soldiers is led by our Government Affairs directorate. Our congressional activities are extremely effective and work in conjunction with our grassroots legislative resolutions process. One of the highlights is the weekly electronic "Legislative Newsletter." To put it in tactical terms, this newsletter by e-mail is on time and on target to give chapter leaders and members the information they need about activities in Congress and the administration. Using our resolutions as a guide, AUSA uses personal outreach, letter writing campaigns, Capitol Hill events and targeted publications to get the message out. Our current legislative resolutions focus on people—soldiers, families and Army civilians—readiness and force transformation.

For soldiers, families and Army civilians, we will urge Congress to: close the pay gap for both soldiers and Army civilians; continue to fund high-quality health care; bar any TRICARE fee increases; enact legislation to repeal the VA offset on retirees' military entitlement (concurrent receipt); and protect the full value of retiree and annuitant income.

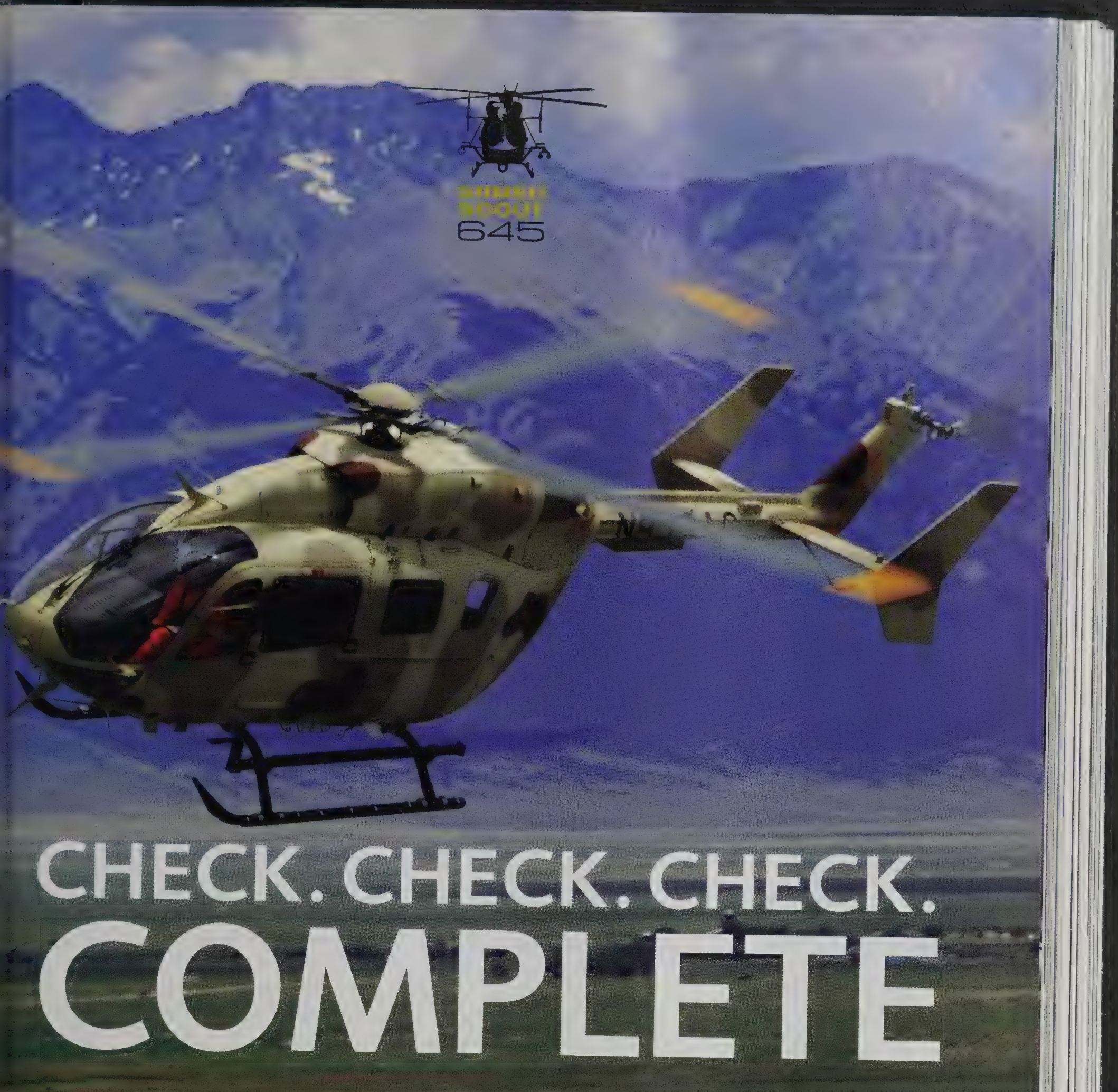
Our resolutions on readiness include urging the administration and Congress to increase base defense budget funding to at least 5 percent of GDP, with the Army's share at least 28 percent; support the rebalance of the force between the active and reserve components; fund operations and maintenance, individual and unit training, and Army recruiting and retention programs; fund timely supplemental appropriation support for resetting the force; and authorize and fund an active duty Army of 700,000.

Resolutions concerning force transformation include pushing for support and funding of advanced technology development; provision of stable and sufficient research, development, test and evaluation funding and funding for modernization and enhancement programs; and acceleration of funding for high-payoff weapon systems that support the Army's modernization requirements for current and Future Forces.

Our theme and agenda for the Army will remain steadfast: budget share, end strength, compensation, maintenance and modernization, quality of life and readiness. While the numbers may appear to be up, we cannot relax our message or support for soldiers and families. Just as our wonderful NCOs have remained steadfast and true to their mission and their soldiers, we at AUSA will remain committed to keeping our Army strong. ★



CSM Julie Walter, command sergeant major of the 702nd Brigade Support Battalion, 4th Brigade Combat Team (Stryker), is currently deployed to Operation Iraqi Freedom.



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2009: The Year of the NCO



By Pete Geren*
Secretary of the Army

War stories and tales of valor are how most Americans know and remember the noncommissioned officers of the U.S. Army; the legends of the American sergeant—SGT Alvin York and SGT Audie Murphy, as well as the grim face of Bill Mauldin's SGT Willie—come to mind. In reality, the full story is that and much more. While today's NCOs continue to build on their history of courage in combat and strength of character, the demands of 21st-century conflicts have broadened

*Rep. John M. McHugh (R-NY) has been nominated to succeed Secretary Geren.





Pete Geren *became the 20th Secretary of the Army in July 2007. In March 2007, he was named Acting Secretary of the Army. He previously served as the Under Secretary of the Army, Acting Secretary of the Air Force and special assistant to the Secretary of Defense, with responsibilities in the areas of interagency initiatives, legislative affairs and special projects. Prior to joining the Department of Defense, Secretary Geren was an attorney and businessman in Fort Worth, Texas. He served as a member of the U.S. House of Representatives from Texas' 12th district for four terms. During his tenure in Congress he served on the Armed Services, Science and Technology, and the Public Works and Transportation Committees. Prior to that he was executive assistant to U.S. Sen. Lloyd M. Bentsen. A graduate of the University of Texas, he received his juris doctor from University of Texas Law School.*

the roles and responsibilities of the NCO. Examples from around the Army tell the rest of the story best.

After two tours in Iraq, SSG Ryan Collson found himself back in the desert, but this time in the dust-choked and sprawling streets of Dire Dawa, Ethiopia's second-largest city, with a population of approximately 400,000 people.

SSG Collson and his civil affairs team (CAT-A15) found Dire Dawa to be different from Iraq, not just in its colorful buildings and permissive environment, but its inhabitants—they were grateful for the assistance offered by SSG Collson and his team.

Dire Dawa is poverty-stricken, rich in history and home to a number of religious faiths, including Christianity, Islam and Hinduism. Success in this diverse and complex society requires sound judgment, experience and cultural sensitivity to accomplish even the simplest task.

CAT-A15's mission sounds simple—promote regional stability in order to deny a haven for terrorists—but it is easier said than done. As team sergeant, SSG Collson was responsible for a 17-soldier team, eventually growing into a joint civil affairs element consisting of 22 U.S. military and 15 host-nation nationals. Their battalion headquarters—the 402nd Civil Affairs Battalion—was hundreds of miles away in Djibouti. CAT-A15 operated independently under SSG Collson's leadership. On any given day, SSG Collson and his team worked to bring potable water, build and repaired aging infrastructure, and provided access to education for children in the region.

SSG Collson routinely negotiated with officers in the Ethiopian military and political leaders—leaders who grew to trust him to plan, coordinate and execute missions vital to the people of the region. The scope of SSG Collson and CAT-A15's independence and responsibility was unheard of for an NCO in the Ethiopian army, and he got the job done.

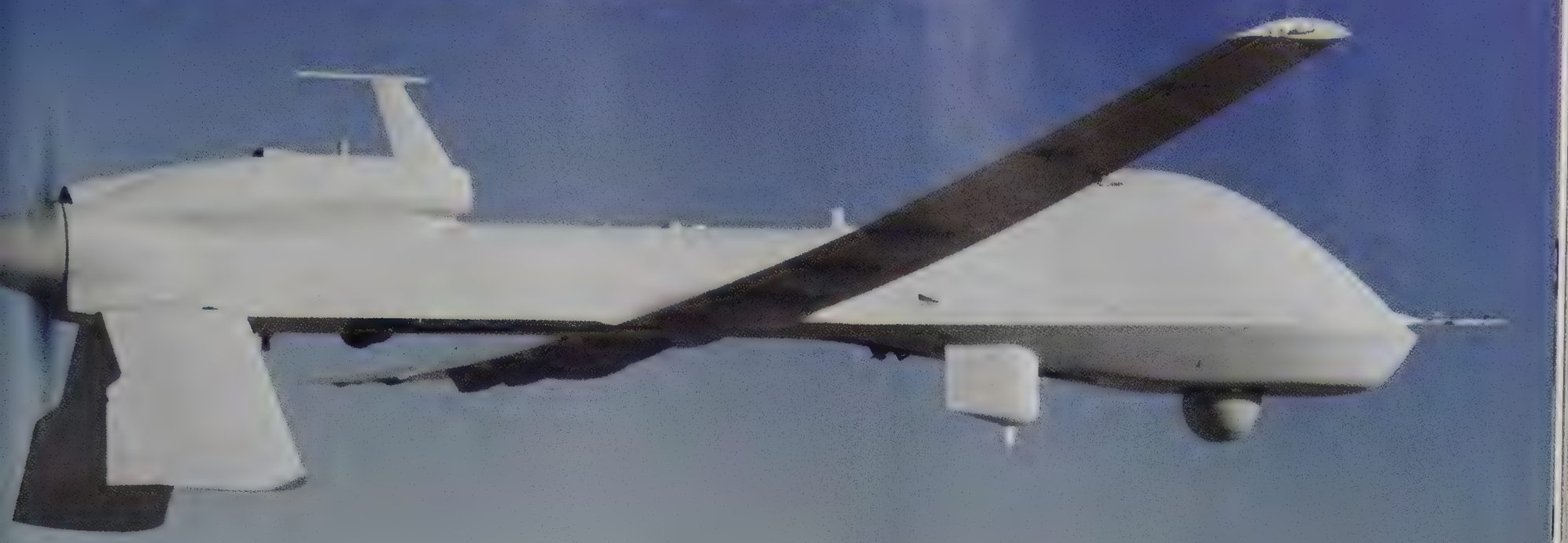
Over nearly four decades since the beginning of the all volunteer force, the U.S. Army NCO Corps has grown in leadership and responsibility. Today's NCOs are empowered to plan, coordinate and innovate—at home and abroad.

A day in the life of SSG Collson and countless other NCOs would be unheard of in any other army in the world today, in peacekeeping and in warfighting.

On the morning of June 25, 2005, SFC Ed Malone was the platoon sergeant of a "knock-and-greet" security patrol in the Sarai District of Tal Afar, Iraq. The platoon included 25 Iraqi and American soldiers. The Sarai District was an al Qaeda stronghold from which insurgents launched attacks throughout the city. The knock-and-greet patrols were a routine security measure designed to instill confidence among the civilian population. On this day, however, the routine patrol turned into a four-hour firefight.

Two hours into the fight, SFC Malone realized he had to make a critical decision: press forward with the mission or withdraw, weighing the growing strength of the enemy and the chances of timely friendly reinforcements. His soldiers had seized an insurgent safe house and discovered a large

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A powerful combat multiplier, Sky Warrior is already earning its place as the most sophisticated, reliable, and capable aircraft in the U.S. Army's UAS inventory.

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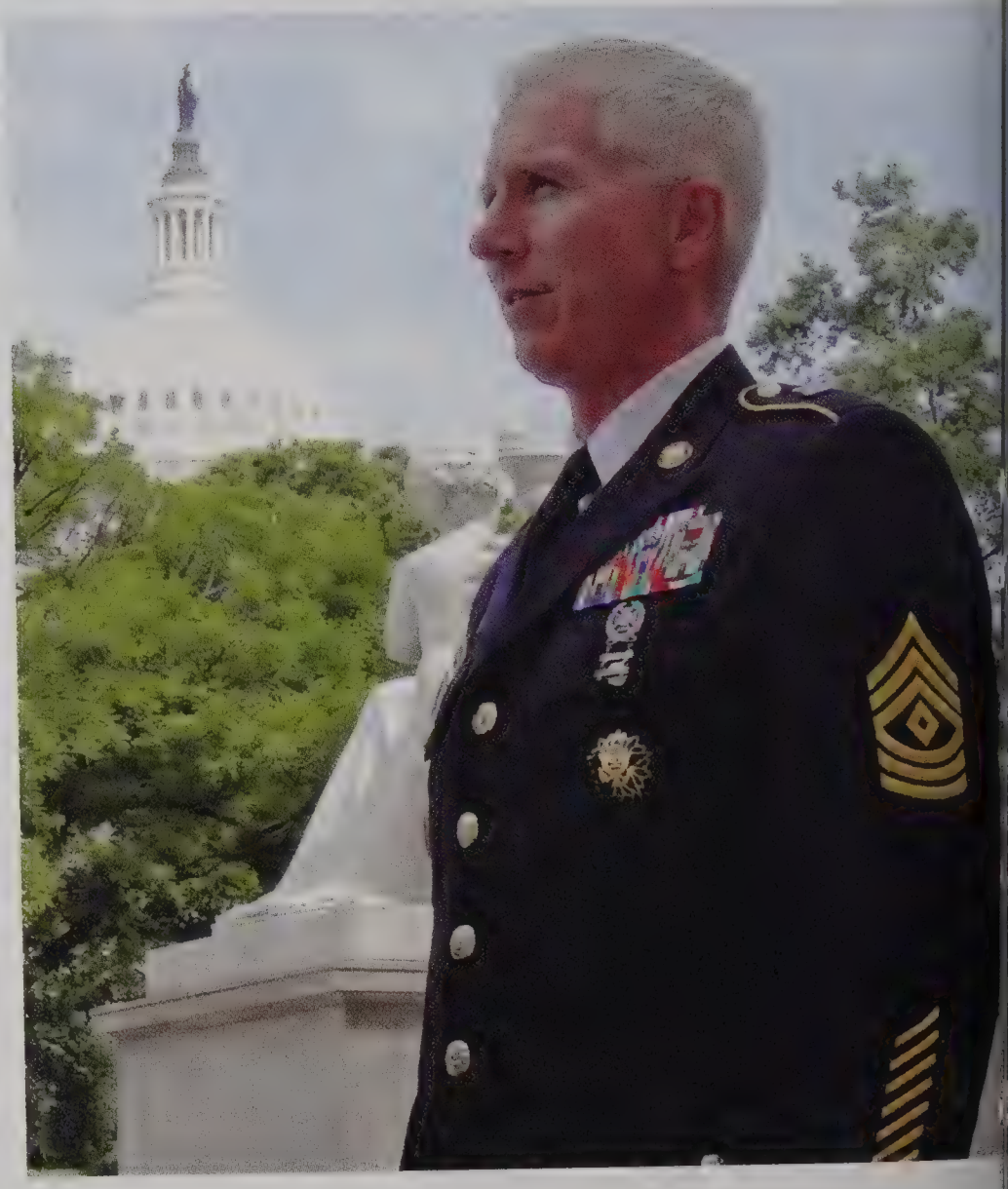
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cache of weapons and explosives. Without hesitation, SFC Malone decided to press on. He would not yield the neighborhood or the cache to the enemy. The patrol held their position and secured the area, fighting street by street. Near the end of the fight, SFC Malone was shot in his left heel. Despite his wound, he continued to direct his unit until relieved by reinforcements.

SFC Malone's decision to remain and fight saved the weapons cache and was a turning point in the effort to secure this critical sector of the city—this fight was one of the key engagements that allowed U.S. and Iraqi security partners to reclaim Tal Afar from the insurgents. SFC Malone's decisions contributed to accomplishing both tactical and strategic objectives. For his courage and leadership, SFC Malone was awarded the Bronze Star with "V" device. In typical NCO fashion, when asked about his actions, SFC Malone replied, "I was focused on taking care of my guys."

Our NCOs play a key role in every aspect of our Army, from the recruiting station to basic training—Fort Benning, Ga., to Baghdad—to planning and executing complex combat operations, civil affairs missions, medical and logistical operations, and both foreign and domestic humanitarian assistance and disaster relief. Our



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NCOs are versatile and adaptive leaders, building, shaping and leading our Army.

Three years ago, CSM William Gilliam, Ohio National Guard Command Sergeant Major, traveled to Hungary as a member of the National Guard State Partnership Program. While there, he met with the Hungarian land force's senior enlisted soldier, Command Sgt. Maj. Janos Zsoter, who holds a rank equivalent to the Sergeant Major of the Army. Command Sgt. Maj. Zsoter shared insights gleaned from his own attendance at the U.S. Army Sergeants Major Academy and his efforts to bring the U.S. Army's enlisted rank structure to the Hungarian military: "We want our NCOs to be as professional as our American counterparts."

Only two decades ago, the platoon leader, the platoon sergeant and their squad leaders were expected to execute one mission at a time, normally involving a single objective. Platoon tasks generally were executed as a 30-man team and within a narrow battlespace. Their tasks were well defined, primarily in support of a parent unit's objective.

Today platoon-sized units typically conduct multiple missions simultaneously. Their missions are often geographically dispersed and require squad-level separation. Instead of focusing on a single task within a large unit mission, NCOs act independently to meet the commander's intent. They train individual and collective tasks.

In Iraq and Afghanistan, junior NCOs routinely execute simultaneous missions within a platoon, such as convoy security, a combat patrol, intelligence gathering or forward operating base security. NCOs are in the lead, serving as ambassadors, engaging with local civilians and negotiating with area leaders.

Today's Army relies on NCOs to make critical decisions independently—decisions with strategic impact on the mission and the entire field of operations. NCOs are expected to develop tactical and technical solutions and make strategic-level decisions both on and off the battlefield—and within the highest echelons of the Army.

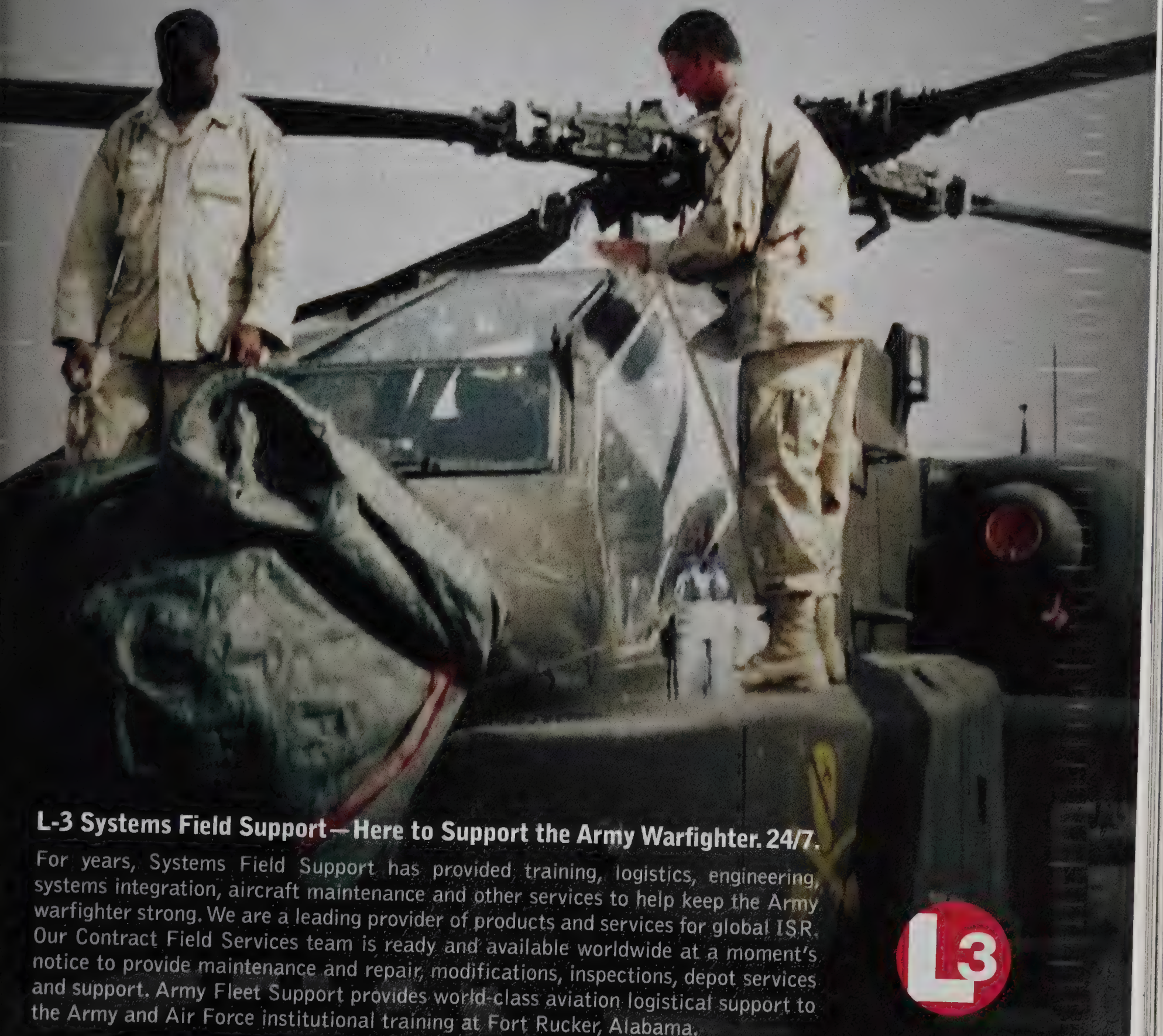
This year, for the first time in its 47-year history, the prestigious Frank Pace Jr. Award was presented to a noncommissioned officer, MSG Stuart T. Coupe. Named after a former Secretary of the Army, the award recognizes one civilian employee and one military officer serving in a staff capacity at Army Headquarters whose contributions provide significant improvements to Army operations and objectives. While working as an action officer within the Office of the Deputy Chief of Staff, G-1, MSG Coupe recognized the difficulties wounded warriors were experiencing navigating the maze of red tape in seeking proper care. Seizing the initiative, MSG Coupe restructured the administrative policies for wounded warriors to make them user-friendly. He developed a comprehensive document for leaders in support of wounded warriors. Although a non-medical NCO, he became the subject-matter expert on administrative policies for the Army's wounded, ill and injured soldiers. As Secretary Gates has told us, "Aside from the war itself, we have no higher priority [than our wounded warriors]." MSG Coupe advanced this top priority for the Army and for the Department of Defense.

The critical role and talents of our reserve component NCOs add yet another dimension of discipline and initiative. Their unique civilian abilities and professional experiences are proving invaluable to our mission success across the full spectrum of operations.

In 2005, SFC Patrick McDonald, a Reservist from the state of Washington, played a major role in planning and supporting the Iraqi elections. He used his civilian education (a doctorate in political science) and his experience as a senior official with Washington's Office of the Secretary of State to provide expertise and leadership for this critical mission, assisting in the implementation of a massive voter registration effort. Earlier this year, now-MSG McDonald was back in Iraq, heading up the American Embassy's support for Iraqi provincial elections.

Declaring 2009 as the Year of the NCO acknowledges a fact of life in today's Army: The NCO is the backbone of our Army, counted on like no other NCO in any army in the world, and the noncommissioned officers of the U.S. Army are making a difference every day in the 80 countries around the world where our soldiers are on point for freedom.

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The Army of the 21st Century

By GEN George W. Casey Jr.
Army Chief of Staff

The perils and challenges of the 21st century are increasingly apparent. The United States' sense of domestic invulnerability to external threats was destroyed on 9/11. Since then, we have been at war—a long-term ideological struggle with a global extremist network. More than one million have served in the campaigns in Afghanistan and Iraq, and more than 5,100 of our soldiers, sailors, marines, airmen and civilians have sacrificed their lives.



These opening engagements of the 21st century are harbingers of the emerging security environment. In the years ahead, the United States will confront complex, dynamic and unanticipated challenges to our national security and to the collective security of our friends and allies. These challenges will occur in many forms and will be waged across the spectrum of conflict—ranging from peaceful competition to general war and at all points in between—and in all domains—land, sea, air, space and cyberspace.

To succeed in this new environment, our Secretary of Defense has reinforced the principle of balance in our defense strategy: balance in our response to the current conflict vice preparing for future conflicts; balance in preparing for irregular warfare vice conventional warfare; and balance between the cultural advantages that have given us security vice the cultural changes needed to preserve it.

Given the emerging security environment, the evolving character of conflict, and the Secretary of Defense's vision of balance in our defense strategy, we see four roles for land forces in the 21st century: *prevail* in protracted counterinsurgency campaigns; *engage* to help other nations build capacity and to assure friends and allies; *support* civil authorities at home and abroad; *deter and defeat* hybrid threats and hostile state actors.

To fulfill these four roles, we need an Army that is a versatile mix of tailorable and networked organizations, operating on a rotational cycle to provide a sustained flow of trained and ready forces for full spectrum operations and to hedge against unexpected contingencies—all at a tempo that is predictable and sustainable for our all-volunteer force. To achieve this, we must continuously adapt our force and the institutions that support and generate it.

An Era of Persistent Conflict

After more than seven years at war, we are facing a future in which several global trends will shape the emerging security environment and exacerbate the ideological struggle we are engaged in. Although such trends pose both dilemmas and opportunities, their comprehensive impact will increase security challenges and frame the conflicts confronting our nation.

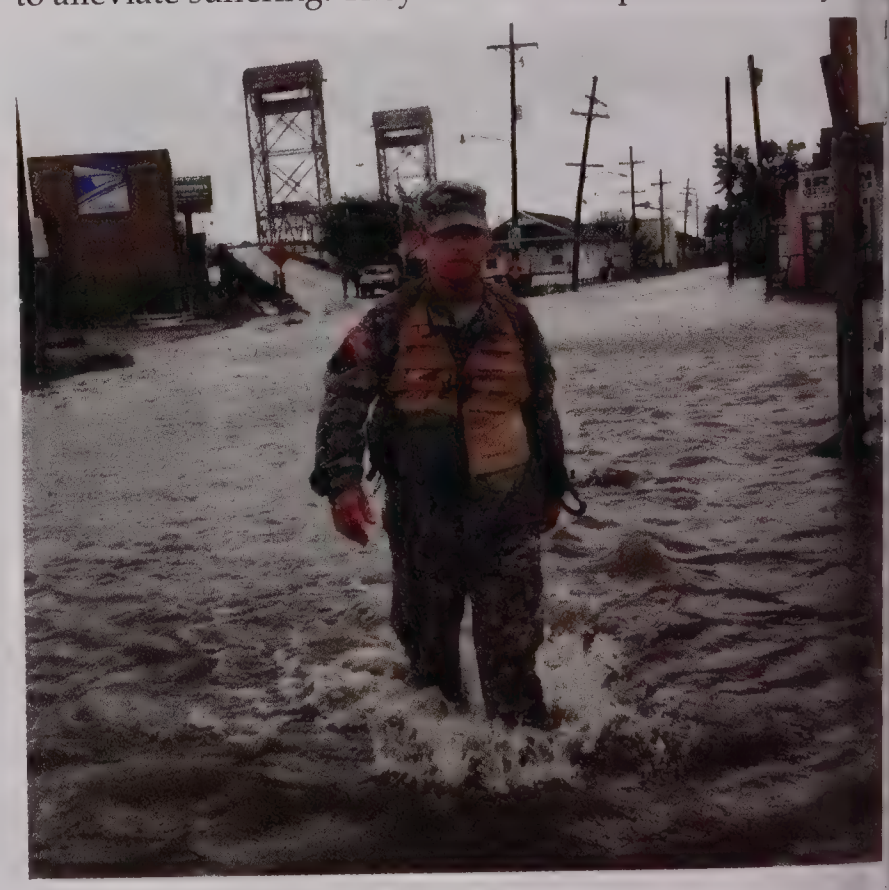
Globalization can spread prosperity by accelerating the transfer of trade, technology and ideas, but it can also propagate destabilizing influences. While globalization has brought prosperity to people around the world, its benefits are unequally distributed, creating "have" and "have not" conditions that can spawn conflict. In addition, the interdependence of the global economy amplifies the local impact of distant crises, as demonstrated by the food, energy and financial disruptions of the last year.

Technology is another double-edged sword. Inexpensive access to information enables entrepreneurs and innovators to collaborate in developing new technologies and improving existing ones. Yet our adversaries can exploit these same technologies to export terror around the globe.

Population growth in the developing world expands markets, but the accompanying "youth bulge" can also increase the potential for instability and extremism. Studies predict that the populations in some developing countries will double in the next few decades, and some estimates hold that by 2030, 60 percent of the world's population will live in cities. This speaks volumes about the densely populated urban areas in which our land forces will operate in the future. Conversely, in some portions of the developed world, population growth is negative; depopulation undermines established economies and cultures, inviting potentially destabilizing immigration.

Increased resource demand is a consequence of growing global prosperity and populations. While this demand may encourage more efficient use of natural resources and the development of alternatives, burgeoning middle classes in countries like China and India will exacerbate demands on already scarce resources. These rising demands for energy, water and food may enhance the potential for conflict.

Climate change and natural disasters have energized states and international institutions to work closer together to alleviate suffering. They can also compound already dif-





GEN George W. Casey Jr. *became the 36th Chief of Staff of the Army in April 2007. His previous assignment was commander, Multi-National Force-Iraq. He has served in operational assignments in Germany, Italy, Egypt, Southwest Asia and the United States and has commanded at every level from platoon to division. GEN Casey served as a congressional program coordinator for the Office of the Chief of Legislative Liaison and as the special assistant to the Army Chief of Staff. He returned to the field as chief of staff for the 1st Cavalry Division before commanding the division's 3rd Brigade. He became the assistant chief of staff, G-3 (Operations), and later the chief of staff for V Corps. He then became assistant division commander (Maneuver) and then assistant division commander (Support) for the 1st Armored Division. He returned to Washington to serve as the deputy director for Politico-Military Affairs, J-5, for The Joint Staff, before commanding the 1st Armored Division in Germany. He later commanded the Joint Warfighting Center and served as the director for Joint Training, J-7, U.S. Joint Forces Command, the director of Strategic Plans and Policy, J-5, and the director of The Joint Staff. He also served as the 30th Vice Chief of Staff of the Army. GEN Casey has a master's degree in international relations from the University of Denver.*

ficult conditions in developing countries, causing humanitarian crises, driving destabilizing population migrations and raising the potential for epidemic diseases.

The two trends of greatest concern are proliferation and failing states. Proliferation of weapons of mass destruction (WMDs) increases the potential for catastrophic attacks that may be globally destabilizing. Al Qaeda and affiliated terrorist groups already seek WMDs and, given the opportunity, will use them against Western interests. Meanwhile, failed or failing states that lack the capacity or will to maintain territorial control can provide safe havens for terrorist groups to plan and export operations. The merging of these two trends is particularly worrisome: failing states that offer safe haven to terrorists seeking weapons of mass destruction.

The combined impact of these trends makes it likely that the next decades will be ones of persistent conflict—protracted confrontation among state, nonstate and individual actors that are increasingly willing to use violence to achieve their political and ideological ends. In the years ahead, as interests collide across the globe, protracted competition and friction will manifest themselves in many forms. As a result, our commitments in the future will be more frequent and continuous; conflicts will arise unpredictably, vary in intensity and scope, and will be less susceptible to the traditional mechanisms of conflict resolution.



The Character of Conflict Evolves

Nations and other actors will act to serve their own interests, so conflict is a "normal" aspect of our environment. Although the fundamental nature of conflict is timeless, its *character* reflects the particular conditions of each epoch. The global trends that shape this era of persistent conflict will also significantly shape the character of conflict in the 21st century.

Conflicts will be waged between and among diverse actors, both state and nonstate, with the former frequently acting covertly and the latter sometimes acting through state sponsorship or as a proxy for a state. The Second Lebanon War in 2006 pitted the state of Israel against a nonstate actor, Hezbollah, supported by Iran and Syria, inside the territory of Lebanon. Such situations pose special challenges to an international system that has been focused on conflict between and among nation-states. Conflict motives, objectives and even the identities of protagonists will be difficult to discern and will shift over time. The presence and power of nonstate actors, in particular their ability to challenge nation-states, is a significant shift in the character of conflict. States no longer hold a monopoly on the instruments of war.

Ideological competition for sovereignty and influence over populations also characterizes current conflict. Gaining the support of indigenous populations, always instrumental to the outcome of conflict, is now so important that conflict cannot be waged *around* the people—it is unavoidably waged *among* the people. Many of the safe havens we encounter today are "safe" not because of their geographic location, but because of the popular support our adversaries find in those locations. Adversaries will seek to mitigate our advantages, operating anonymously among indigenous populations to avoid detection and counteraction. Hezbollah, for example, made extensive use of civilian areas to deter Israeli counterstrikes.

Future conflicts will be unpredictable and may arise suddenly, expand rapidly into unanticipated locations, and last for unexpected durations. Adversaries will pursue dynamic combinations of means, shifting their employment in rapid succession and exploiting the element of surprise. Conflicts may also expand to areas historically immune to conflict, such as space and cyberspace. Previous trends may be reversed suddenly: Hezbollah inflicted more Israeli casualties per Arab fighter in 2006 than did any opponent of Israel in 1956, 1967, 1973 or 1982.

Local conflicts and their social, economic and political consequences offer increasing potential for spillover, creating regional and globally destabilizing effects. Moreover, the interconnectedness of a globalized world can cause crises to spread quickly while the conditions necessary to resolve crises, such as governance or effective rule of law, usually evolve slowly; this poses increased challenges for governments.

Conflicts will continue to take place under the unblinking scrutiny of the 24-hour media cycle and the World Wide Web. A global media presence and increasingly uni-



versal access to information will ensure that details of a conflict are rapidly available through social and cyber networks. Adversaries will have many forums in which to disseminate their messages worldwide.

Future conflicts will also present a new array of threats that defy simple categorization. Formerly, we could differentiate and categorize threats as conventional or unconventional; regular or irregular; high intensity or low intensity; traditional, terrorist or criminal. Such categorization was useful because each categorized threat had an associated counter. It is no longer enough to discern the "correct" conflict category and then pursue a singular solution; we are more likely to face hybrid threats—dynamic combinations of conventional, irregular, terrorist and criminal capabilities employed asymmetrically to counter our advantages.



The Israeli-Hezbollah conflict also illustrates the potential impact of hybrid threats. Hezbollah employed modern civil technology (secure cell phones, computers and video telecommunications systems) combined with military means (antitank, surface-to-air and antiship missiles, rockets, mortars and unmanned aerial vehicles) and improvised explosive devices in an innovative array of unanticipated patterns. In addition, Hezbollah placed an emphasis on holding ground, concentrated its forces and engaged in sustained fights associated more with conventional forces. Hezbollah's methods and tactics were a mix of the conventional and unconventional.

Clearly, today's nonstate actors are not limited to irregular, guerrilla methods. The future is not simply irregular warfare by nonstate actors—adversaries can be expected to use a full spectrum of options, including every political, economic, informational and military measure at their disposal. When combined with cultural and demographic factors, these measures will present U.S. military leaders with complex challenges that will require increasingly complex solutions. Hybrid threats necessitate hybrid solutions, and such solutions increasingly require military forces that are adaptive and versatile enough to function in a variety of situations against myriad threats with a diverse set of national, allied and indigenous partners.

Given the strategic environment and the projected character of 21st century conflict, we believe that, for the next several decades, we should prepare our land forces, as part of a joint and interagency team, to:

■ *Prevail in protracted counterinsurgency campaigns.* It is imperative that we prevail in our current missions in Iraq and Afghanistan. Successful coun



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terinsurgency (COIN) operations are inherently protracted, and we must be prepared to sustain the required level of commitment to prevail in these and future COIN operations.

■ *Engage to help other nations build capacity and to assure friends and allies.* The Army can help in preventing future conflicts by increasing the capacity of other nations' security forces—both military and police—to uphold the rule of law, ensure domestic order and deny their territory to terrorists.

■ *Support civil authorities at home and abroad.* We work primarily through the National Guard to provide support to civil authorities in the United States, augmenting them with active forces as necessary. Abroad, we will provide support to various agencies of governments, as we are doing in Iraq and Afghanistan today, helping them plan, integrate and execute the political, economic and information elements of national strategy. This should be seen as a national asset.

■ *Deter and defeat hybrid threats and hostile state actors.* While we do not anticipate a "near-peer competitor" challenging us in the foreseeable future, we can never lose sight of the requirement to train and prepare for this state-on-state conflict. There are nations in the world today training their forces with our Army as their primary threat.

A Balanced Army for the 21st Century

Fulfilling these four roles for land forces will require a fundamentally different Army from the one we had before 9/11. While the Army has been progressively adapting since the end of the Cold War, we must take advantage of what we continue to learn in our current operations, use emerging technology and continuously adapt to build a balanced Army to meet the demands of 21st-century conflict.

We need to continuously adapt to a versatile mix of tailorable and networked organizations, operating on a rotational cycle, to provide a sustained flow of trained and ready forces for full spectrum operations and to hedge against unexpected contingencies—at a tempo that is predictable and sustainable for our all-volunteer force.

One truism about predicting the future is that we will never get it exactly right; indeed, we can only aspire not to be too wrong. Thus we need to build versatility into our force. We will develop a versatile mix of forces that allows us to address the broadest range of future requirements, providing us a base from which to adapt to reality as it unfolds. The advent of modular brigades is a great first step in building this versatile mix of organizations, but it is not the only step. A versatile army must provide operational commanders a balanced mix of force types—heavy, Stryker, light, special operations forces (SOF) and enablers—so that they can devise effective combinations for any tactical situation. It is our strategic estimate, supported by our experience over the last decade, that we need a multiweight force: Infantry brigade combat teams (BCTs) augmented with protected vehicles, Stryker BCTs, and armored BCTs, all integrated with SOF and enablers, to provide the nation with versatile land-force options for the wide variety of security challenges we will face. All of these formations have some utility at any point on the spectrum of conflict, while each BCT type possesses relative advantages that compensate for the disadvantages of the other types.

The Army's modular design efforts of the past five years have immeasurably enhanced the inherent versatility of Army units. Modular units were designed to be tailorable. We have distributed critical enablers previously held at division level and higher to BCTs, improving their ability to be tailored for a broad range of missions. These key enablers include intelligence, surveillance and reconnaissance; civil affairs; psychological operations; public affairs capabilities; and expanded logistics support, providing them the versatility to effectively perform a variety of missions and to operate independently. The Army can also task organize these modular units with force packages of additional enablers to enhance their ability to meet expanded mission requirements, increasing the land options available to combatant commanders.

We can extend this versatility by rethinking the composition of our Army prepositioned stocks, ensuring that they contain full spectrum capabilities, including those that increase the survivability of Infantry BCTs within an improvised explosive device environment. In this way, we can ensure that our forces are fully prepared for the broadest range of challenges.

Moreover, these units will be networked, providing robust digital connectivity down to the soldier level. The network will enable our soldiers to access information at the right place and time to achieve a decisive advantage over any enemy they face. The network will enhance their situational





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Army Capabilities (FY11 Goal)
1:2 (AC) and 1:4 (RC)

	2 x RC Force Pools	RESET	TRAIN – READY	AVAILABLE
ACTIVITY		Recovery From Deployment	Full Spectrum Training/Prepare for Deployment	Deployed or Available for Deployment/ Engagement
READINESS LEVEL		Not Ready	Manned and Equipped at C2 Levels to C1 Levels	Manned and Equipped at C1 Level
AVAILABILITY		> 180 Days	90–180 Days	Available
FORCE PACKAGE	1 Corps HQ Remainder of RC Forces*	1 Corps HQ 4 Div HQs 20 BCTs ~92K Enablers	1 Corps HQ 5 Div HQs 20 BCTs ~92K Enablers	1 Corps HQ 4 Div HQs 20 BCTs ~92K Enablers

*The remainder of our 18 divisions, 73 BCTs and enablers would rotate through the force pools at a 1:4 ratio.

awareness, enabling them to know where they are, where friendly forces are and where the enemy is, and affording them the ability to engage the enemy with precision fires. It will give commanders the ability to fuse data more efficiently, enabling a more accurate understanding of the battlefield and better collaboration to enhance decision making. In future operational environments, where the tactical environment and strategic environment will often be seamless, it is the network that will provide the ability to gain and maintain the operational advantage over our adversaries.

To provide a sustained flow of trained and ready forces at a tempo sustainable for our all-volunteer force, we have instituted a rotational readiness model called Army force generation (ARFORGEN). ARFORGEN is a transformation in how the Army builds readiness, and it includes both active and reserve component forces.

The ARFORGEN model consists of three force pools: reset, train-ready and available. Each of the three force pools contains a versatile force package to provide a sustained flow of forces for current commitments and to hedge against unexpected contingencies. The force pools are available at varying time intervals based on their readiness levels to provide operational and strategic depth. The ARFORGEN model provides a versatile mix of ready forces capable of full spectrum operations at a boots-on-the-ground (BOG)-to-dwell ratio of one to two for active component (AC) forces and one to four for reserve component (RC) forces. The optimal ARFORGEN allows for a BOG-to-dwell ratio of one to three and one to five for active and reserve components, respectively. (BOG refers to time spent deployed, and dwell refers to time spent not deployed, so that a one to two BOG to dwell could mean one year deployed and two years at home.) In emergencies, the model permits "surging" forces from the train-ready pool to meet unexpected demands.

We are organizing our force structure on the ARFORGEN model to continuously supply an operational headquarters; five tactical headquarters; 20 Infantry, Stryker and armored BCTs; and enabling forces organized, trained and equipped for full spectrum operations at a sustainable rate of one to two AC and one to four RC. This versatile mix of land forces could sustain operations in Iraq and Afghanistan and, at lower demand levels, provide ready global reaction forces and regionally oriented forces for engagement in support of combatant commander theater security cooperation programs. Further, this model allows us to surge portions of another five-division corps and enabling forces from the train-ready pool to respond to unexpected contingencies across the spectrum of conflict, and it allows us to have two more corps available at longer commitment times to provide strategic depth.

The enablers generated as part of each force package are an essential component of the ability of the Army to sustain land campaigns and to provide support to the joint force. These enablers provide a versatile mix of operational capabilities. They consist of tailorable packages of aviation, artillery, engineers, intelligence, sustainment and other capabilities that enable commanders to organize their operational areas to achieve their campaign objectives. Enablers also provide the versatility to conduct full spectrum operations by permitting tailoring of force packages with the type and amount of capabilities required for a specific environment or mission. Our modular enablers are designed to "plug-in" to allow for rapid adjustment within a force when the environment or enemy changes.

We are building an integrated Total Force in which our RC forces are also on a rotational cycle, but at a deployment rate of about half that of their AC counterparts. This cyclical readiness model will increase predictability for soldiers, families, employers and communities, and enable our RC to remain an integral element of the operational force while providing the nation with a strategic reserve (that is, those nondeployed RC units that are two to three years from commitment).

The increased demands of our combatant commanders coupled with the size of our AC force, require that we routinely employ RC forces as part of our operational force. Continued and routine access to our RC forces is essential to sustaining current operations, as is improving the overall operational experience and quality of our RC forces. In addition, adequate Army National Guard forces will be ready and immediately available to their state and territorial authorities to respond to domestic crises.

We have begun the implementation of ARFORGEN and are already using the model to meet the requirements for Army forces around the world, but we are doing so mostly with institutions and processes that were originally de



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signed for an Army of a different era. Our generating force, the force that recruits, equips, trains and sustains our Army, is critically important to building the Army of the 21st century. Without our generating force, we would not have been able to sustain the last eight years of continuous mobilization and combat operations across two separate theaters. No other nation in the world has the quality or capacity in its generating force that America has. While the generating force has been constantly adapting to meet the requirements of the operating force over the last eight years, we must now look for fundamental change in the generating force to support an Army operating on a rotational cycle. The generating force must be as versatile as the operating force it supports. This will require making fundamental changes to the processes and policies we use to manage the Army. Once the mission is defined, our institutions must seamlessly and continuously adapt—tailoring force packages and quickly readjusting training, staffing and equipping—to ensure units have *all* of the tools necessary to succeed. Adapting our institutions and generating-force processes to support an Army operating on a rotational cycle is an essential element of our transformation.



Land Force Qualities

A balanced Army adapted to the requirements of 21st-century conflict will be fundamentally different in every dimension of doctrine, organization, training, staffing, equipping, stationing and support from the Army we had on 9/11. A balanced Army must be organized to be *versatile*; deployable enough to be *expeditionary*; responsive enough to be *agile*; precise enough to be *lethal*; robust and protected enough to be *sustainable*; and flexible enough to be *interoperable* with a wide range of partners. These qualities—being versatile, expeditionary, agile, lethal, sustainable and interoperable—are the defining qualities of a balanced Army. They describe not only the operating force, but also the generating force, and will form the basis of our overall modernization strategy and for the ground combat vehicle.

Versatile. Versatility is the central organizing principle of a balanced Army. It is this quality that will enable our forces and institutions to effectively execute operations across the spectrum of conflict. Versatility implies that: Precision is impossible when predicting force requirements in this volatile and uncertain strategic environment, and that our Army must be able to react to the future as it actually presents itself. A versatile force must possess a balanced mix of multipurpose capabilities and sufficient capacity to execute our doctrine of full spectrum operations across the range of military operations, from peacetime engagement to major combat.

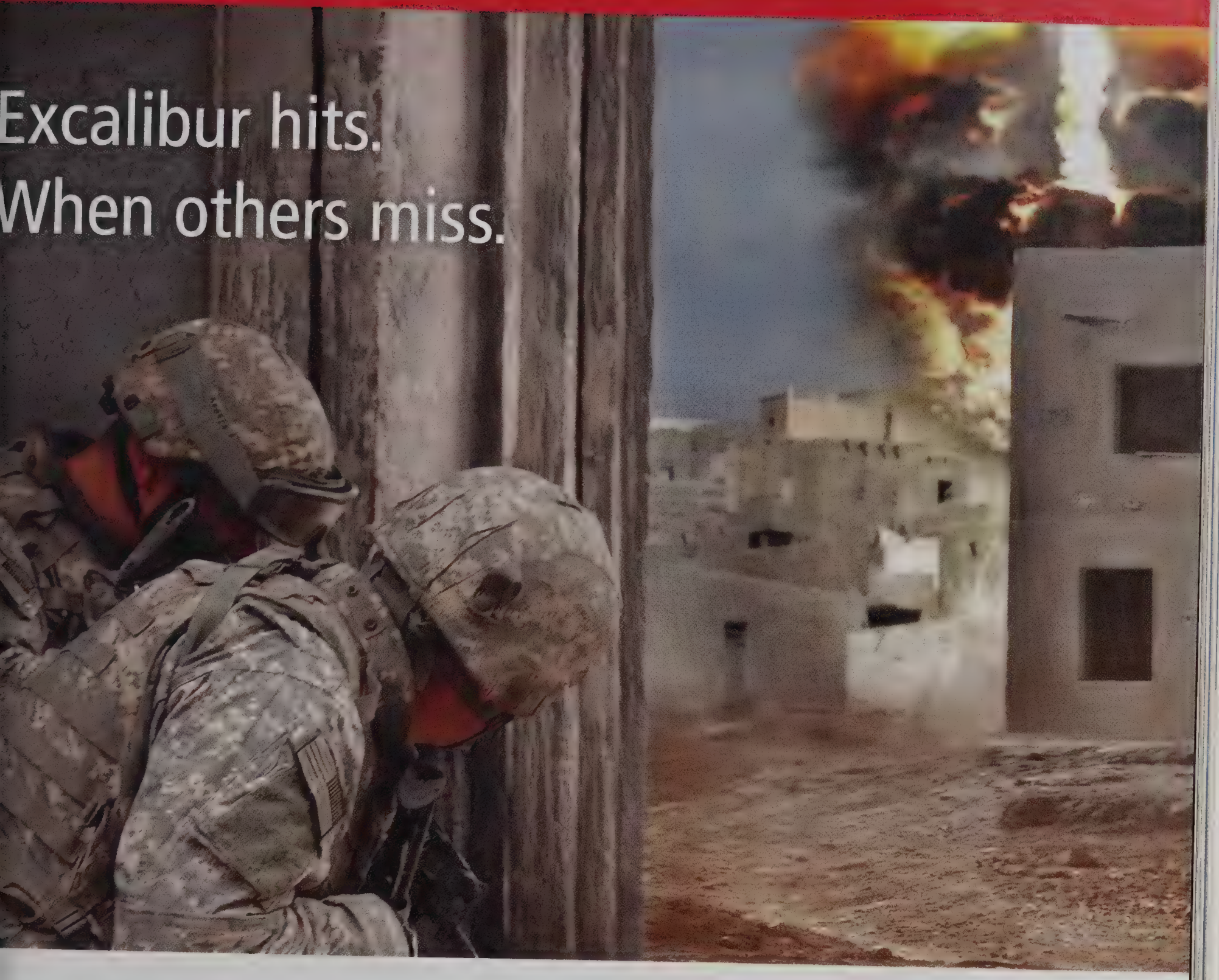
Versatility begins with how the Army thinks—a solid foundation of coherent, relevant and adaptive concepts and doctrine. The revision of Field Manual (FM) 3-0 *Operations* established full spectrum operations as our capstone operational concept: *Army forces combine offensive, defensive and stability or civil-support operations simultaneously as part of an interdependent joint force to seize, retain and exploit the initiative, accepting prudent risk to create opportunities to achieve decisive results.* The concepts supporting full spectrum operations are further refined in updates to subordinate doctrinal manuals such FM 3-24 *Counterinsurgency* and FM 3-07 *Stability Operations.*

Most importantly, the Army is only as versatile as its soldiers, leaders and civilians. Every soldier is a warrior, and each must be trained and ready to effectively operate in any environment. Versatile leaders are competent in their core proficiencies, yet broad enough to operate across the spectrum of conflict. Army civilians must be adaptable, providing broad expertise and stability across myriad tasks and functions. Developing versatile soldiers, leaders and civilians will enable us to lead the versatile Army we need to overcome 21st-century challenges.

Expeditionary. The dynamic and global character of conflict will require the Army, as part of a joint force, to deploy to the site of problems in austere and unfamiliar locations around the world, to sustain operations for extended periods of time, and to engage with the security forces of other nations. To do this, we must be expeditionary. The Army must be organized, trained and equipped to provide forces capable of operating in austere environments, comfortable in diverse cultural environments, able to conduct joint forcible entry operations and able to fight, if necessary, upon arrival.

The ARFORGEN model and the Army's global force posture define the available start points for expeditionary response. We have recently shifted to a more continental U.S.

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based posture, adjusting our forward stationing. There is a natural tension between the flexibility of a continental U.S.-based response posture and the immediacy of forward presence. Forward-stationed forces are an indicator of our regional commitment and a source of assurance to our friends and allies. They also provide a mechanism to increase our cultural awareness and sensitivity. This shift to a continental U.S.-based posture puts added significance on maintaining a robust joint forcible entry capability.

An expeditionary Army must also retain an expeditionary mind-set—the confidence and competence to quickly adapt and function effectively in any physical or cultural environment. Such a mind-set requires soldiers, leaders and civilians to be mentally prepared to deploy anywhere in the world on short notice. Soldiers possessing an expeditionary mind-set have the critical-thinking skills necessary to adapt quickly to unexpected situations in unfamiliar physical surroundings and are prepared to succeed in austere and complex conditions.

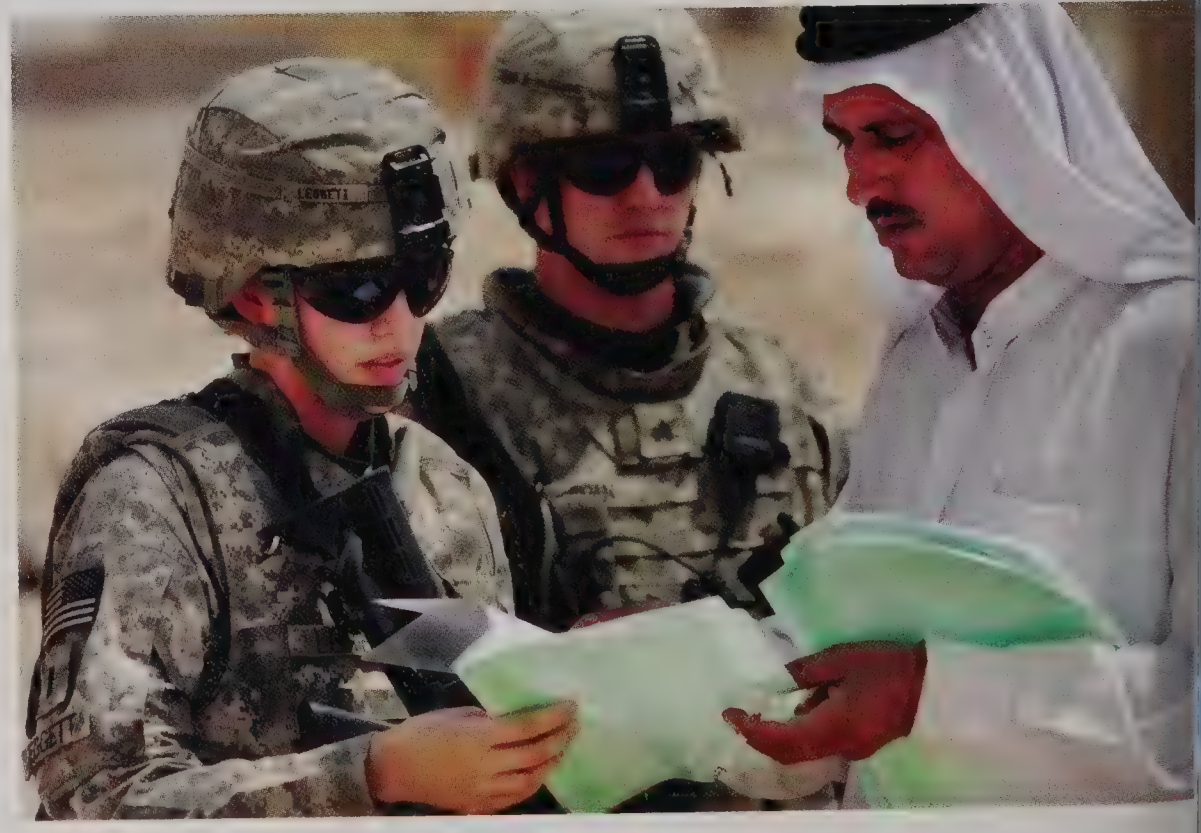
An expeditionary mind-set also has a cultural component. In an era characterized by conflicts in which interaction between soldiers and indigenous populations could mean the difference between victory and defeat, soldiers, leaders and civilians must feel confident interacting with people of different cultural backgrounds and perspectives. Developing this confidence demands that soldiers, leaders and civilians become culturally astute and able to use this awareness to operate innovatively.

Agile. While versatility is the ability to do different tasks, agility is the ability to rapidly shift from one task to another. An agile Army must have forces that can quickly adapt to exploit opportunities in complex environments. To do this, we require not only agile units but also agile minds and institutions.

To build and maintain our agility, we must remain a learning organization, quickly absorbing lessons learned, sharing them and applying them to current and future problems. One key to institutionalizing our learning is adaptive doctrine. Doctrine must grow and adapt based on the hard-earned lessons being learned daily in the field. Our institutions must be able to quickly collect, analyze, learn and disseminate best practices from units in contact and adapt Army doctrine.

Soldiers must possess the mental agility to react quickly and appropriately to changing situations and complex environments. We must prepare soldiers and leaders to function effectively in these complex operational environments through a variety of institutional, operational and self-development educational and training opportunities. Army training and education programs must be dynamic and adaptive, instilling full spectrum capabilities in the operating force while keeping pace with constantly evolving doctrine and operational requirements. We will continue to incorporate hard-learned battlefield tactics, techniques and procedures into individual and collective training so that soldiers and leaders possess the requisite and relevant skills for full spectrum operations. Diverse, realistic training and education will develop the agile soldiers and leaders that make up agile units.

To direct agile soldiers, the Army must continue to develop agile leaders able to handle the challenges of full spectrum operations. Agile leaders are adaptive thinkers who use their individual initiative and understanding of the environ-



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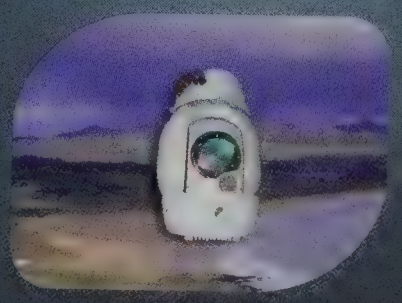
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ment to quickly and boldly seize and exploit opportunities as they present themselves. While our junior officers and noncommissioned officers have had ample opportunities to develop their mental agility on the battlefield, we must develop and empower agile, adaptive leaders at all levels, from the tactical to the strategic.

Agile soldiers deserve agile institutions. While focused on building versatile, agile units capable of adapting to changing environments, the institutional Army has continued to utilize processes and procedures designed to support a static Army. To support an agile operating force, the Army must have an agile generating force. This requires fundamentally transforming generating-force and supporting processes to more effectively and efficiently prepare trained and ready forces for combatant commanders. Institutional agility allows us to adapt to the realities of the future as they present themselves.

Lethal. Only the armed forces possess the core competency of applying lethal force. This competency requires the capability to overmatch any enemy across the spectrum of conflict while mitigating collateral damage. The Army achieves such competency by operating as part of a joint team with air, naval and special operations forces.

Conflicts among populations require the use of proportional lethal force with precision. To do so, soldiers and leaders must be able to quickly and accurately identify targets; discriminate between hostile, friendly and neutral actors; and apply precise lethal effects on identified targets.

Lethal precision requires superior intelligence capabilities, precise delivery systems and broad situational awareness. As the Army provides "capability packages" to BCTs currently fighting in Iraq and Afghanistan, these systems will provide precision fires and advanced intelligence, surveillance and reconnaissance capabilities, exponentially increasing soldiers' ability to positively identify and apply precision lethality to legitimate threats. Concurrently, these systems enable operational-level commanders to gain broader situational awareness and shift resources appropriately to gain an advantage over the threat, while mitigating collateral damage to the surrounding populace.

Finally, the requirement for precision also extends to how we apply nonlethal effects. In a population-centric operating environment, we must be precise in the execution of information operations to ensure that we are sending the most effective message to the right audience in a timely manner. Mastery of the information environment is a critical component of full spectrum operations.

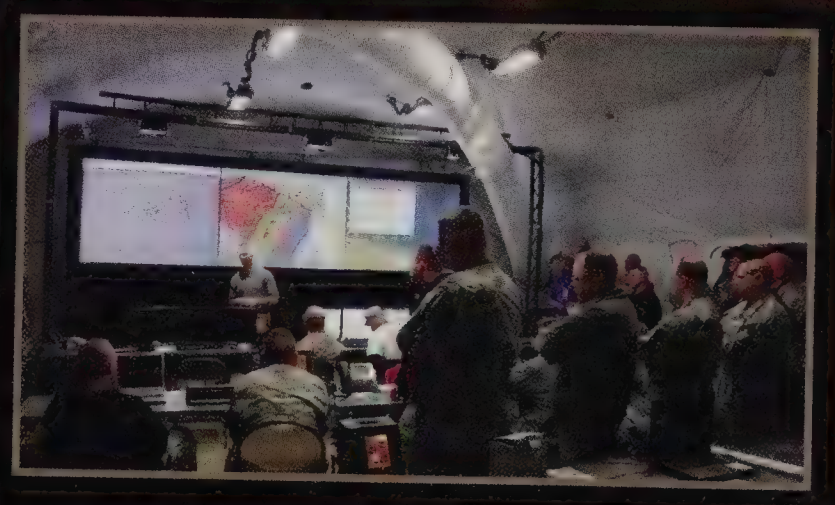
Sustainable. The anticipated expeditionary nature of Army operations in the 21st century—abroad for extended periods of time in austere and unfamiliar locations—requires a fundamentally different view of sustainability. A sustainable Army must integrate national and global resources to ensure that forces are physically available, properly equipped, at the right place at the right time, with the right tools to support the combatant commanders. Flexibility and agility must be the hallmarks of expeditionary sustainability. In addition, our sustainment footprint mus

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take into account the social and political realities of the countries to which we may deploy.

The modularity of the Army sustainment force structure has kept pace with the remainder of the Army. Today our sustainability is achieved through a mix of soldiers, civilians and contractors. We must continually assess that mix to ensure that it will be adequate across the entire spectrum of potential operations to provide the most expeditionary sustainment capability for the operational force.

The Army has developed an affordable equipping strategy that supports ARFORGEN and an Army on a rotational readiness cycle. Army acquisition must use technologies that make us lighter and more mobile while maintaining or improving our survivability and lethality. We must continue to push research and development to produce smaller and lighter energy sources, fuel-efficient engines, and lighter and stronger protection materials.

Our view of the future security environment includes the proliferation of improvised explosive devices (IEDs) across the battlefield. This puts added emphasis on developing technologies and tactics, techniques and procedures that enhance the protection of the force, creating urgency in developing the next breakthrough in lighter protection technologies. In addition, a smaller logistics footprint will be enabled by advances in energy efficiency and reduction in logistics demand by developing more reliable equipment. When coupled with a network-enabled common logistics operating picture, our forces will be more sustainable in austere environments and able to decrease the frequency of driving down IED-strewn lines of communication.

Interoperable. Well beyond the capability to operate on the same radio frequencies and utilize the same caliber ammunition, an interoperable army must be able to build unity of effort with other government agencies, indigenous forces and international partners. The Army can lead the development of interoperability with other agencies, allies and indigenous forces by sharing our planning and organizational skills. The Army can also facilitate unity of effort through the development of both an interoperable mind-set and interoperable technologies.

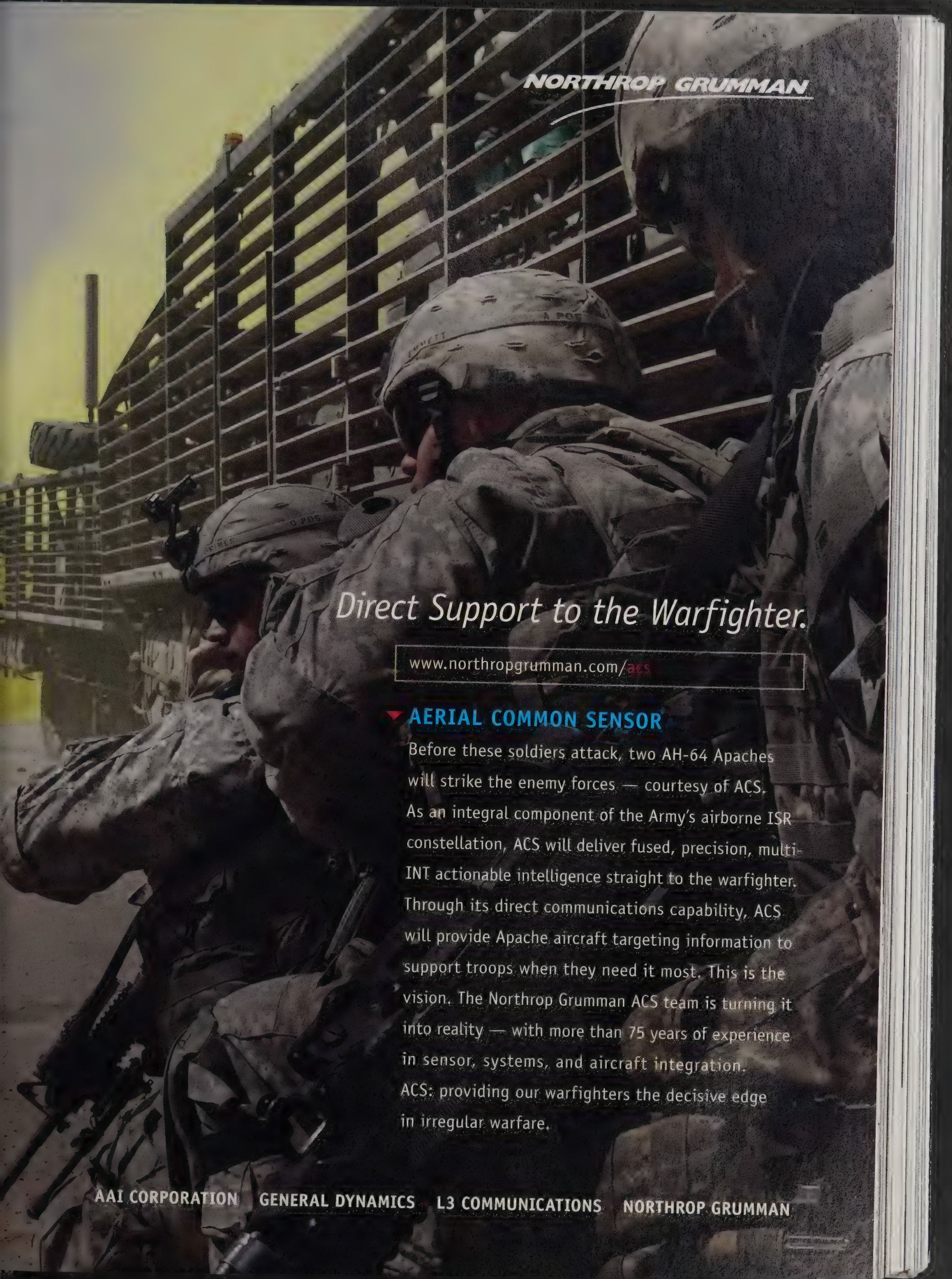
To enhance the Army's interoperability and ensure a common view of how the Army, the joint force and civil government agencies should work collaboratively, we must actively contribute to the development of interagency doctrine. Such doctrine would provide the intellectual and institutional basis for success in full spectrum operations and would ensure that we are integrating all joint, interagency, intergovernmental and multinational efforts to achieve our common strategic objectives.

Furthermore, we must expand educational and experiential opportunities for leaders and soldiers beyond the Department of Defense, including graduate school and training with industry, other government agencies, and with allies and partners. The Army's asymmetric advantage is its people; therefore, we must commit the resources necessary to maximize their intellectual abilities to effectively employ all elements of national power.

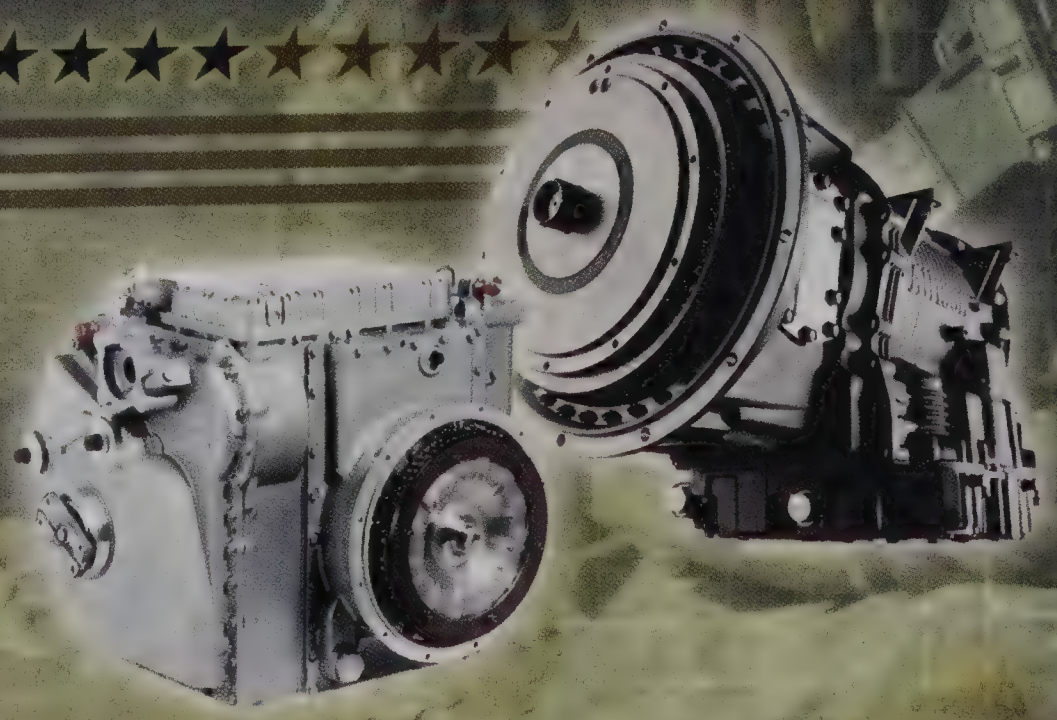
Leading Change

The 21st-century security environment and the continuous adaptation of the Army in order to remain ahead of rapidly evolving threats will put a premium on leaders of character and competence, leaders grounded in Army Values and the Warrior Ethos. This will require a commitment by the institution, leaders and individuals to lifelong learning and development as well as a balanced approach to training, education and experience as the foundation of any leader-development plan. Furthermore, our leader-development policies and programs must support ARFORGEN and the rotational readiness model in order to provide balance and predictability for our all-volunteer Army.

The Army of the 21st century described here will require continuous change. Our strategic environment has evolved dramatically, and so has the Army. The challenges of institutional change in large organizations like the Army are substantial, especially as we are adapting an organization that is already the best in the world at what it does. Our test must not be, "Have we changed?" It must be, *"Have we changed enough?"* Everything is on the table except our core values. We are building an agile, disciplined warrior team that is dominant across the spectrum of 21st-century conflict. It will be, inherently, a balanced Army for a balanced strategy. ★


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The NCO Corps—Our National Asset

The Year of the NCO

By Kenneth O. Preston
Sergeant Major of the Army

The mission of the Army is to fight and win our nation's wars, and we are accomplishing this mission in our continuing war on terrorism. Today the American soldier brings unmatched skills to defending our nation, our allies and our friends. The Army has more than 260,000 soldiers forward-deployed to 80 countries around the world. Of them, 150,000 are in Kuwait, Iraq, Afghanistan and the Horn of Africa in brigade combat teams (BCTs), multifunctional brigades, functional brigades and other force-enabling units. The Army National Guard has more than 67,000 soldiers and the Army Reserve more than 30,000 mobilized, serving all around the world and throughout the United States, providing critical skills to our joint, combined and interagency teams.



We could not do all that we do today as a nation—or as an Army—if it were not for our citizen soldiers. Our Army civilians perform critical missions all across the the force in

support of our Army missions. Today there are more than 4,000 of these Army civilians forward-deployed, along with more than 33,000 contractors supporting our soldiers and their teams.

On January 7, 2009, the U.S. Army officially launched the Year of the NCO. Our goals this year were to recognize the contributions of our NCO Corps, both past and present; inform the American people, members of Congress and our government of the national asset they have in their NCO Corps; and enhance the capabilities of our NCO Corps to provide our commanders a greater asset and warrior leader in the accomplishment of their missions.

One such enhancement is Army Career Tracker (ACT), a web portal that integrates and eases access to every training and education opportunity available to soldiers. ACT will provide all soldiers and their leaders the ability to manage their professional development. The Army fast-tracked ACT this year to gain approval as an Army system of record. Now we will pilot ACT at the end of this calendar year to test the capabilities of the system and continue with full implementation in mid-fiscal year (FY) 2010, two years ahead of schedule. While this initiative has come to fruition during the Year of the NCO, ACT will provide soldiers, NCOs, officers and our Army civilians the mechanism to channel professional-development opportunities far beyond our institutional schools.

ACT is not a replacement for institutional education opportunities, but a portal to search, see, understand and act on the extensive array of education programs available. With ACT, soldiers will search for and enroll in training and education; examine and manage their professional and personal career development; and view their entire assignment history, all from one site. ACT will provide leaders with the ability to access and monitor their subordinates' career development as well as offer personalized training recommendations based on soldiers' professional goals.

One of the significant NCO development tools that ACT provides is a relevant and current professional-development career map. With the implementation of ACT, all soldiers will have access to a career map that contains guidance on what steps they could take to develop their occupational skills and their promotion potential. During the week of October 26th, the Army will launch a demonstration of technology for Army Career Tracker to Career Management Fields 18 (Special Forces) and 25 (Signal Corps) at Fort Bragg, N.C. Through a combination of focus groups and online testing, the Signal Corps and Special Forces will assess ACT's features and capture feedback specific to the soldier's needs. The Army invested $3.2 million dollars in the development of ACT this year and will invest $41 million dollars over the next five years to complete development for all soldiers and Army civilians.

As part of ACT, this year we fully funded and developed the first two of five tiers of our structured self-development (SSD) program, which will provide greater education opportunities in the future to expand our formal NCO Education System (NCOES) courses. Under the Year of the NCO initiative to accelerate development of our SSD program, the U.S. Army Sergeants Major Academy (USASMA) completed the first modules for the three remaining levels of SSD. As a formalized program under NCOES, SSD allows for total soldier development across an entire career, broadening development beyond our four institutional professional military education (PME) courses. SSD contains clearly defined learning requirements sequenced throughout soldiers' careers. Training and Doctrine Command (TRADOC) will synchronize these learning requirements with soldiers' operational and institutional assignments to promote continuous growth as warriors and warrior leaders.

SSD builds knowledge and skills through a defined sequence of learning approaches using the strengths of formal education and experiential learning. It provides NCOs with expanded and enhanced professional development by providing additional training beyond PME courses through an online capability. This additional education opportunity closes gaps in PME and unit training and fosters lifelong learning throughout an NCO's career. SSD is adaptive and flexible to the needs of the Army and our NCOs. SSD provides access to current education and doctrine, initiatives, concepts and developments to enhance NCOs' knowledge at any point in their careers.

A significant professional-development tool that fully leverages technology and enhances our NCO Corps skills, SSD bridges gaps between the operational and institutional learning domains.

TRADOC also began to repurpose the Army correspondence course program (ACCP) into our guided self-development program, which will provide purpose and direction for those soldiers seeking additional professional-development opportunities. Under this Year of the NCO initiative, the repurposing validated all course content to ensure relevancy of material and resulted in the elimination of 550 outdated subcourses. TRADOC is working with the American Council on Education to review ACCP for the potential awarding of college credit to soldiers and NCOs completing



SMA Kenneth O. Preston *is the 13th Sergeant Major of the Army. Previously, he was command sergeant major for Combined Joint Task Force-7, serving in Baghdad, Iraq. He has served in every enlisted leadership position from cavalry scout and tank commander to command sergeant major and Sergeant Major of the Army. As command sergeant major, he had assignments with 3rd Battalion, 8th Cavalry Regiment, 1st Cavalry Division, Fort Hood, Texas; 3rd (Grey Wolf) Brigade, 1st Cavalry Division, 1st Armored Division, Bad Kreuznach, Germany; and V Corps in Heidelberg, Germany. He is a graduate of the Basic Noncommissioned Officers Course, Advanced Noncommissioned Officers Course, First Sergeants Course, M1/M1A1 Tank Master Gunner Course, Master Fitness Trainer Course, Battle Staff Noncommissioned Officers Course and the U.S. Army Sergeants Major Academy.*

SFC Jared C. Monti, Medal of Honor Recipient

SFC Jared C. Monti, a Fire Support Specialist (13F), served as a targeting NCO assigned to Headquarters and Headquarters Troop, 3rd Squadron, 71st Cavalry Regiment, 10th Mountain Division, Fort Drum, N.Y. He distinguished himself with acts of conspicuous gallantry above and beyond the call of duty against an armed enemy in Gowardesh, Nuristan Province, Afghanistan. As this article goes to press, preparations are under way for the President of the United States to award SFC Monti the Medal of Honor posthumously for his heroic actions in combat in Afghanistan.



On June 21, 2006, then-SSG Monti helped lead a 16-man patrol assigned to conduct surveillance in Gowardesh. An enemy force of more than 50 insurgents attacked the patrol as dusk fell. The enemy had established two support-by-fire positions above the patrol on a wooded ridge. SSG Monti immediately returned fire and ordered his patrol element to seek cover and return fire. He called for indirect fire and close-air support (CAS) while directing the patrol's fires on the enemy positions. SSG Monti engaged the enemy using his rifle and a grenade, successfully disrupting a major attempt to flank the patrol, while still calling for fire.

After discovering that PFC Brian J. Bradbury was critically wounded 10 meters from protective cover, SSG Monti quickly moved into enemy fire, coming within 3 feet of Bradbury's position. The intense machine-gun and rocket-propelled-grenade (RPG) fire, however, forced him back to the rocks.

SSG Monti rose again to maneuver through another barrage of enemy fire to secure PFC Bradbury. Again, he was forced back in place as the enemy intensified their fires. Unwilling to leave his soldier wounded and exposed, SSG Monti made a third attempt as the remaining patrol members covered him. After a few steps, he was mortally wounded by an RPG. The indirect fire and CAS he had called for earlier arrived and broke the enemy attack, killing 22 enemy fighters.

SFC Monti's actions that day saved his team's lives and preserved the patrol's position. His repeated acts of heroism inspired his patrol to fight off and destroy the numerically superior enemy force.

SFC Jared C. Monti is the sixth servicemember to receive the nation's highest award for valor since 9/11 and the first soldier in Afghanistan to receive the Medal of Honor. The second paragraph of the NCO Creed reads: "My two basic responsibilities will always be uppermost in my mind, accomplishment of my mission and the welfare of my Soldiers." SFC Monti's focus on accomplishing the mission and the welfare of his soldiers exemplifies what it means to be an NCO. Because of his sacrifice and selfless actions, the men with whom he served are alive today.

CCP courses. This retrofit under guided self-development ll align policies and procedures to increase NCO compe- cy and performance.

The Warrior University web site is operational and in- asing the number of civilian institutions of higher learn- available within the College of the American Soldier. of these universities are affiliated with the Servicemem- s' Opportunity Colleges (SOC) degree program and rec- ize the education credits of each school's curriculum, ile helping TRADOC enhance and accredit our military rses for college credit. Warrior University is a web site t centralizes both training and education opportunities ilable across the Army. The site eases the identification l access for both Army military training courses and rses taught under the College of the American Soldier. It ws soldiers to easily identify training and education op- tunities by centralizing all courses from more than 20 sites. TRADOC created the College of the American dier to increase a soldier's ability to complete college- l programs and maximize transferability of credits, le minimizing residency requirements and costs. Continuing to add additional colleges and universities to this program expands soldiers' choices and enhances their ability to get a college education as they serve throughout their careers.

The Army fully funded a major NCOES transformation recently, which will continue over the next several years. TRADOC took the first steps toward a One-Army school system by transferring responsibility for seven Warrior Leader Course (WLC) institutions from Forces Command to TRADOC control, which centralizes oversight, resourcing and scheduling. The transformation of NCOES provides education to the soldier and NCO aligned with the Army Force Generation (ARFORGEN) model. NCOES transformation provides NCOs the flexibility to attend PME courses at more beneficial times and locations. A transformed NCOES will: develop broadly skilled NCOs who think and adapt on the fly, exceeding their comfort zones; accelerate development and prepare NCOs to serve and operate above their current grade levels by starting leadership development sooner and migrating course content one level down; and create a flexible and adaptive education system de-



To launch the Year of the NCO in Europe, SMA Kenneth O. Preston addresses servicemembers at the Rhine Ordnance Barracks, Germany, in March. SMA Preston praised NCOs for their contributions to the Army's efforts worldwide.

signed to rapidly address development gaps. NCOES transformation supports mobile training teams to provide PME courses at home station, supporting ARFORGEN and allowing NCOs to spend their nights with their families while furthering their careers. NCOES transformation adds SSD modules between PME courses to allow all soldiers to further their education needs in all environments throughout their careers. In addition, it combines civilian accreditation of our PME courses with the College of the American Soldier to help NCOs earn their associate, undergraduate and graduate degrees as part of lifelong learning.

I recently received an e-mail about the leadership attributes of his young NCOs from a concerned senior NCO currently deployed in theater. He felt the combination of early promotions with the streamlining and shortening of NCOES courses was not preparing NCOs for the leadership challenges facing them individually, nor for the challenges they were facing with their soldiers and families after nearly eight years of war. The Chief of Staff of the Army and I have heard and understand the concerns and challenges from this senior NCO and others across the force. To better understand the current state of NCOES and where we are heading in the future, let's review our system from a historical perspective.

In late 2005, Army leaders directed TRADOC to lead a task force called the Review of Training and Assignments of Leaders (RETAL) to take a critical look at NCOES and NCO assignment processes. RETAL's mission was to provide Army leaders with recommendations for continuity and change in our processes that would develop the skills and attributes required of our soldiers to accomplish the Army's primary mission to fight and win our nation's wars, support the National Security Strategy and simultaneously transform the Army. RETAL spent six months interviewing Army leaders from staff sergeants through general officers in the active and reserve components. The focus of the interview process was to understand from the field's perspective the strengths and weaknesses of NCOES and determine development requirements supporting the Army's transformation to a full spectrum expeditionary force. As part of its charter, RETAL reviewed the NCO development policies and programs to ensure that they supported the current and future development of the NCO Corps.

The RETAL task force reported to Army leaders in 2006 the following recommendations taken from more than 2,600 interviews and 13,000 survey responses: Focus on tactical skills, warrior tasks and battle drills; maintain NCO core competencies (standards are important); start NCO development early and make it continuous; improve squad- and platoon-level training; and increase the emphasis on civilian education for NCOs. The overarching theme from NCOs during and after this analysis period was their concern for the Army's operational deployment tempo and limited dwell periods between deployments, both of which reduced their ability to attend NCOES. NCOs voiced their concern regarding the increased stress on themselves and their families. They were also concerned with units getting NCOs to NCOES courses within limited dwell periods.

The immediate changes made to NCOES stemming from the RETAL study began with transforming the existing Primary Leadership Development Course (PLDC) to the Warrior Leader Course in 2006. The new curriculum focused on first-line leaders leading soldiers in the execution of warrior tasks and battle drills, troop-leading procedures and precombat checks. This curriculum deemphasized some of the garrison skills-focused drill and ceremonies, and uniform inspections, incorporating the learning objectives of these garrison skills into the combat-executed tasks. To further assist soldiers and NCOs get to school and return to their families and units more quickly, TRADOC extended the academic duty week to seven days and extended the hours of the academic duty day, allowing a 30-day, 196-hour academic course to be condensed to a 15-day, 192-hour academic course.

TRADOC immediately began reviewing the changes that could be made to the Basic Noncommissioned Officer Courses (BNCOC) and the Advanced Noncommissioned

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Officer Courses (ANCOC) to give NCOs and their leaders the attributes and skills needed to support the recommended changes from the RETAL study. BNCOC and ANCOC principally provide the technical skills for NCOs to serve as squad leaders and platoon sergeants within their primary occupational career fields. The first two weeks of both BNCOC and ANCOC covered core subjects common to all occupational specialties and taught to all NCOs attending these courses. TRADOC reviewed the curriculum of both courses, revealing redundancy in the common core subjects. Adding one day of instruction to the BNCOC common-core phase allowed TRADOC to shorten every ANCOC by two weeks, shortening the temporary-duty time for senior NCOs away from families and units. TRADOC and its proponent schools extended the length of the academic duty week and duty day to collapse these courses into an eight-week period, or shorter. Only a few specialty career fields were not able to meet the eight-week goals.

Throughout our nation's history and during the current period of persistent conflict, the NCO Corps has adapted to meet every challenge. Historically, junior NCOs serving in our units always exercised tactical leadership within the framework of platoon operations. The importance of the tactical leadership provided by our NCOs on the ground remains the same today; however, those junior NCOs' decisions can now have strategic-level impacts on the overall mission. NCOs need to understand, therefore, the overall character of operations and the context of their mission, the general principles of counterinsurgency and cultural differences so they may make decisions that account for cultural sensitivity. The traditional activities of NCOs—communicating, supervising, training, teaching and mentoring—remain at the core of our roles and responsibilities. We relate care and concern for our soldiers' families to the care and leadership we provide our soldiers. NCOs today must adapt and learn new roles, solve problems, analyze and synthesize information, and manage supplies and resources. The evolution of the operational environment in which many of these activities take place adds complexity and importance to many of the NCOs' traditional tasks. Sergeants and staff sergeants are more often the integrators of tactical effects of organic weapons available to teams, squads and platoons, but also of a wide range of supporting effects from numerous sources. The operating environment, ARFORGEN and constrained resources require the institution to seek new and innovative ways to train and educate soldiers and leaders. The Army must improve soldier access to information and learning materials, and empower soldiers to identify and personalize their learning needs.

In addition to the RETAL findings, the design of our enlisted promotion system created another challenge while supporting an extended conflict. The Army designed the current NCOES system based on a "select, train and promote" model. For example, unit leaders officially "selected" a specialist for promotion to sergeant when the soldier appeared before and passed the battalion promotion board, obtaining a status known as SPC Promotable (P). The SPC(P) would then attend PLDC (now the WLC) to meet the "trained" requirements of the Army. Once the SPC(P) met the cut-off score to qualify for promotion, the Army "promoted" the soldier to sergeant. This system worked well for us in a peacetime Army with limited and brief deployments but did not support an Army at war. Deployment tour lengths of 12 or more months and soldiers who could not attend NCOES courses while deployed required the Army to waive the "train" requirement for soldier promotions. With



For their combat efforts in Afghanistan, soldiers of Company B, 1st Battalion, 10th Special Forces Group (Airborne), stand in formation following a valor award ceremony honoring nine NCOs of their company at Panzer Barracks, Stuttgart, Germany, in July.



THE HISTORY LESSON ENDS HERE.

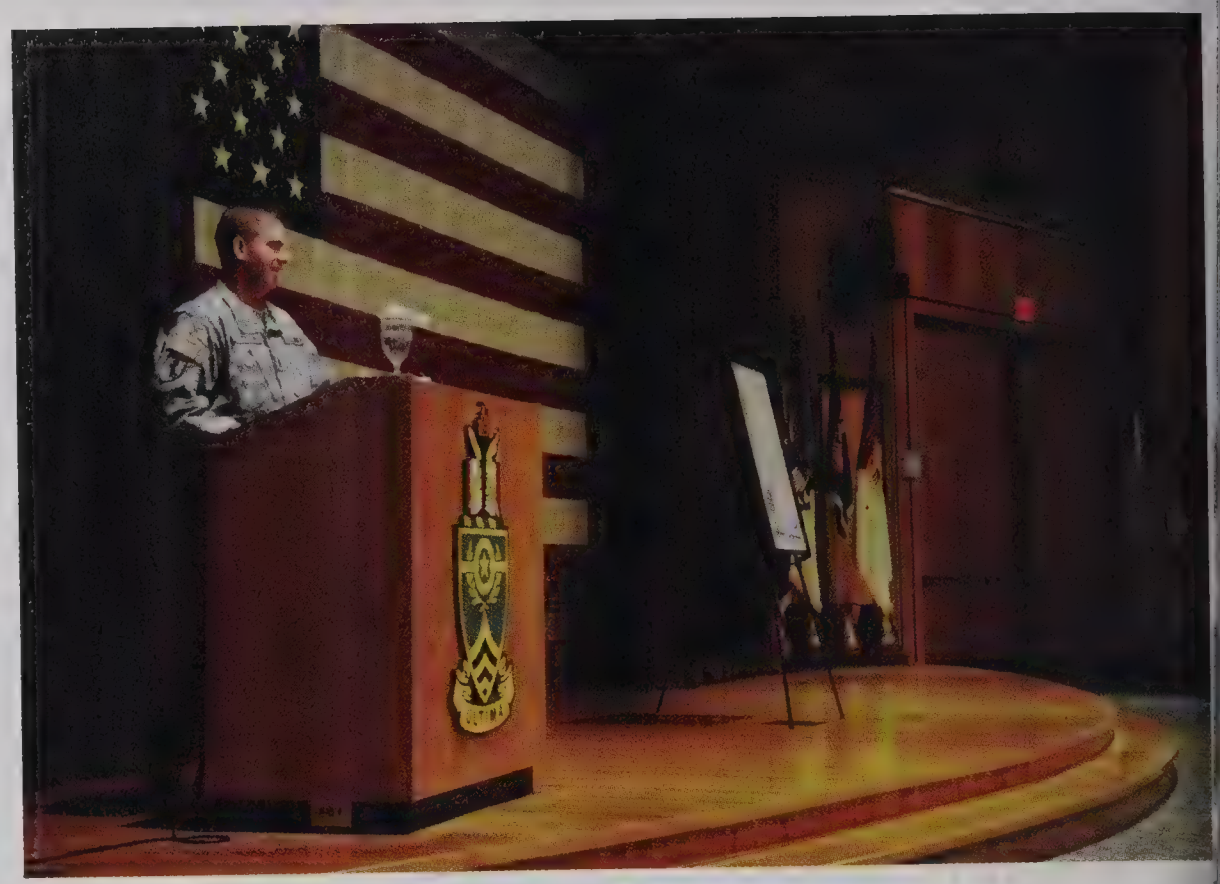
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SMA Preston addresses Class 60 at the Sergeants Major Academy (USASMA) in August. The USASMA's structured self-development program allows for total soldier development across an entire career.

out this waiver, soldiers deployed in support of combat operations would not receive their promotions at the same pace as those soldiers not deployed—in some cases, two years later.

Over the past eight years, many NCOs have served in leadership positions prior to attending the required level of NCOES. We have historically always had, and will always need, leaders to place NCOs into positions of increased responsibility "above their rank" to fill critical unit leadership vacancies. The timing of the attendance to NCOES courses, the need for NCOs to fill critical leadership roles above their current rank and the results of the RETAL task force all contributed to the future changes to our NCOES structure.

Supporting future changes to the NCOES structure, TRADOC widened the window of eligibility to allow soldiers and NCOs to attend these professional-development courses. This past year, the Army widened the window of eligibility for privates first class (PFCs) to attend the WLC. The rapid growth of the Army to build more deployable formations exceeded our ability to grow sergeants, which left new or resetting units short of first-line leaders. Many units deployed in support of operations in Iraq and Afghanistan with less than 100 percent of their authorized NCO strengths. In many cases, junior soldiers and NCOs filled important leadership roles above their current rank. In some cases, PFCs filled corporal and sergeant positions, assuming responsibility for two or three soldiers. Serving in these positions of increased responsibility throughout their units' train-up period of approximately six months, followed by 12 months or more deployed and three months of reintegration, these junior leaders led their soldiers for nearly two years before getting the opportunity to attend school. In support of the RETAL study, educating soldiers earlier in their careers became a priority. Today the Army encourages unit leaders with privates first class and specialists serving in leadership positions to send their soldiers to the WLC to gain those leadership attributes and set the conditions for their young leaders to succeed.

This year, BNCOC will transform into the Advanced Leader Course (ALC), and ANCOC will transform to become the Senior Leader Course (SLC). As with the WLC, educating soldiers and NCOs earlier in their careers supports the findings of the RETAL study and provides the education needed to show leaders how to think and not what to think. WTC reflects this realization. TRADOC will take those relevant leadership tasks and attributes taught in ANCOC and merge them with BNCOC, expanding this course to become the ALC. Each of the component schools retains responsibility for the technical training and education provided in each course. As an example, Armor Crewmen (19K) attending the ALC will receive the technical training to serve as tank commanders (squad leaders) and the leadership attributes to serve as platoon sergeants. The window of eligibility for the ALC now allows sergeants and staff sergeants to attend school in preparation for the responsibilities of serving as section sergeants and the preparedness to step up and serve as platoon sergeants.

The First Sergeant Course will collapse into the current ANCOC, expanding and transforming this course to the SLC. Potential common-core subjects of the SLC include lethal and nonlethal fires, full spectrum operations, family violence, conflict management, ethics/solving complex problems, land power, soldiers' rights, and physical security, among others. The window of eligibility for the SLC now allows staff sergeants and sergeants first class to attend school in preparation for the responsibilities of serving as platoon sergeants.

The Army will implement a new senior staff NCO course designed to provide staff skills for assignment above the brigade level for senior NCOs in the rank of sergeant first class and above. This course will provide the education and skills needed for these senior NCOs to serve in staff positions supporting senior Army and joint headquarters. The course subjects will include: how the Army runs; preparing staff studies; staff estimates and courses of action; managing priorities and combining the elements of full spectrum operations during conflict; full spectrum operations and the levels of war; land operations and the changing threat; and joint task force operations and organizations.

The Army's growth and ongoing transformation will restore balance to our force, our units, our soldiers and the



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families. Achieving an ARFORGEN model that supports a minimum ratio of one year deployed to two years dwell for the active forces and one year deployed to four years dwell for our reserve component units is critical to providing predictability and stability for our force. Increased dwell periods will reduce stress on soldiers and families and allow the Army and TRADOC to expand and slow NCOES courses to their predeployment pace, while incorporating all the improvements NCOs and their leaders have asked for in the RETAL study and lessons learned from theater.

In order to meet both the development needs of the NCO and the operational needs of the Army, we must pursue a lifelong learning approach to leader development. For all soldiers, there are some lengthy periods of time—lulls between attending the different levels of our professional military education courses—when education and leader development must continue. Our institutional schools represent the first of three pillars of learning and development supporting soldiers' growth throughout their careers. Although critical to development, this first pillar is the "thinnest" of the three when you count the number of days soldiers spend in classrooms throughout their careers. The second pillar—representing more than 70 percent of the learning and education we receive over the course of our careers—is our operational experience and assignments. We learn hands-on from the breadth of assignments, leadership opportunities, and leader mentoring and counseling to grow and develop those attributes that make us successful in positions of increased responsibility. Routine counseling, leader-taught classes that address unit-specific weaknesses, and NCO and officer professional-development classes in the unit reinforce what our leaders expect of us every day. The third pillar supporting leader development and education is self-development and self-study. Historically, self-development and self-study were executed voluntarily and encouraged by promotion points for completing ACCP, eArmy U and college courses. NCO and soldier of the month, quarter and year awards and monthly promotion boards focused on those subjects that unit commanders and leaders wanted their soldiers and junior leaders to "be, know and do."

Implementation of SSD further expands training and education opportunities under the self-development and self-study pillar and reinforces a culture of lifelong learning. These initiatives are part of a larger effort to continue professional development and education for all soldiers, while integrating or linking the subjects taught across all three pillars. TRADOC is currently revising the BNCOC common-core subjects to identify those tasks best suited for SSD. The Chief of Staff of the Army authorized the development of an SSD program for all soldiers. Under this plan, soldiers will complete up to 80 hours of distributed learning instruction during the lulls in attendance to their different levels of professional military education. SSD focuses on the common cognitive skills that prepare and enhance our soldiers' and leaders' abilities to lead, and provides the foundation skills for those more complex subjects taught in an institutional course or PME. Some tasks—effective writing, speed-reading and comprehension exercises, and nutritional health—are valuable PME subjects best suited for individual learning in SSD, preserving precious classroom time for subjects requiring soldier and leader interaction. SSD is not intended to replace time in the classroom or shorten course lengths. Course lengths are dependent on the education needs of the soldier in each occupational specialty serving at the required skill level. SSD will allow our PME courses to focus on the rapidly expanding skills and attributes our soldiers and leaders need for the complex environment in which we operate every day. SSD will enable all soldiers and civilians to gain valuable education and immediately begin application of their learning in the units where they serve.

Our strategy must account for the current operational tempo and help soldiers pace themselves. Their development is not a sprint—it is a marathon. As we implement this strategy, we must fully understand what our soldiers and NCOs face when not in garrison, while protecting and building on their experiences gained over the last eight years. While we must challenge our NCOs to exceed their comfort zones, we cannot assign them unattainable or unrealistic requirements. We owe it to our soldiers to find the right balance of training, education, experience, downtime for families and overall quality of life. There is great potential in the use of advanced technology to create realistic scenarios based on operations in the current environment, while improving our training and education activities. The use of gaming, mobile learning, and the virtual world's three-dimensional capabilities can greatly increase the complexity and relevance of the development of the technical, tactical and leadership competencies soldiers and leaders need.

The core responsibilities and roles of the NCO Corps remain unchanged, but the importance, level of complexity, range and breadth of responsibilities continue to evolve in many areas. The development of our next generation of leaders will require an increased level of competence and the ability to learn and adapt quickly, communicate clearly, understand the context of operations and solve complex problems that arise unexpectedly.

We have the greatest combat-experienced all-volunteer force in our history. Continued development of our NCO is an Army priority. For the future, we will maintain this warfighting competency and continue to sharpen our individual soldier and leader attributes across all three pillars of learning.

This year the U.S. Army Sergeants Major Academy opened the Army Physical Fitness Research Institute (APFRI) program to assess the level of physical health and fitness of our next generation of sergeants major. Focusing on our senior NCOs and supporting the Army's comprehensive soldier fitness program (CSFP), the APFRI initiative will use the individual's assessment to educate and train these NCOs and their families. During the USASMA course, our future senior NCOs will learn the value of fitness and nutrition in maintaining a healthy lifestyle across all compo



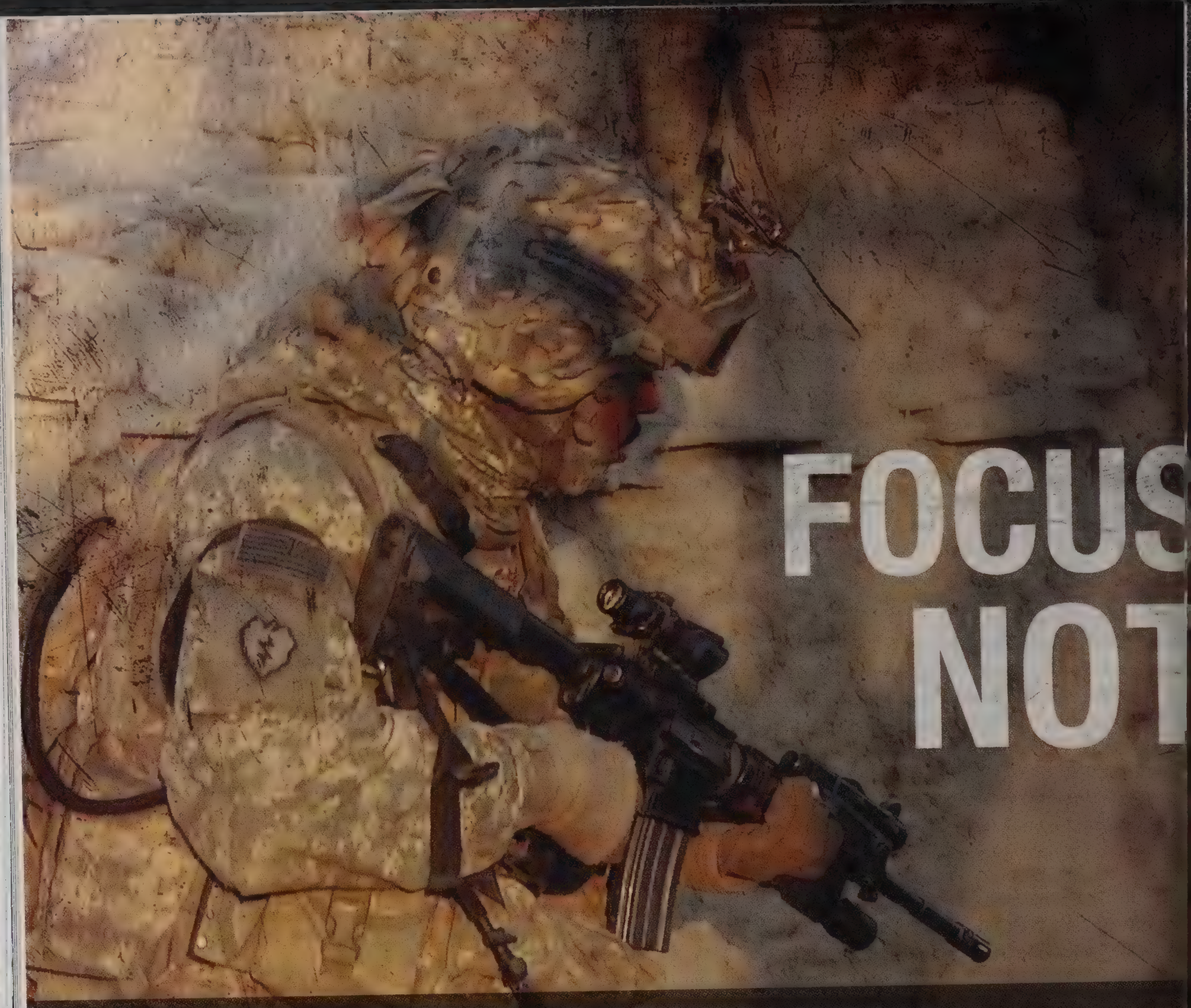
Noncommissioned officers assigned to the Joint Readiness Training Center and Fort Polk, La.: (left to right) SGT Airealle Glynn, Company F, 94th Brigade Support Battalion; SSG Amanda Christopher, U.S. Army Medical Activity/Bayne-Jones Army Community Hospital; SSG Jarod Wicker, U.S. Army Air Ambulance Detachment; SFC Jerald Egbert, 1st Battalion (Airborne), 509th Infantry Regiment; and SSG Tommy Peek, Company A, 2nd Battalion, 30th Infantry Regiment, 10th Mountain Division (Light Infantry).

ents of fitness. USASMA developed a phased approach to he Army's Master Fitness Course and will begin working ducation opportunities into all phases of resident and tructured self-development NCOES courses. To further omplement and support the CSFP, life skills and resiliency raining will support our NCOs throughout their formal NCOES courses, enhancing their capabilities as individuals nd leaders for the future. Class 60 of the USASMA matriculated in August 2009 and will pilot their new program of instruction (POI) this year. In an effort to build complementary officer and NCO teams, USASMA incorporated the ommand and General Staff Course POI—taught at Fort eavenworth, Kan., to our senior captains and majors—into he Sergeants Major Course. This education will enable ose operations sergeants major graduating from USASMA provide their officer counterparts with an increased capability and common understanding to lead battalion-, igade-, division- and corps-level staffs across the Army.

During the Year of the NCO, the Army invested more an $1.6 million dollars to support NCO leadership development at USASMA. The Army will republish *Long Hard oad: NCO Experiences in Afghanistan and Iraq*. The Army ill support the expansion of the *NCO Journal* from a quarrly to a monthly publication. USASMA will begin a longerdue renovation of the NCO Museum located at Biggs rmy Air Field at Fort Bliss, Texas. USASMA will complete digitization and expansion of their Learning Resource Library by the end of this year.

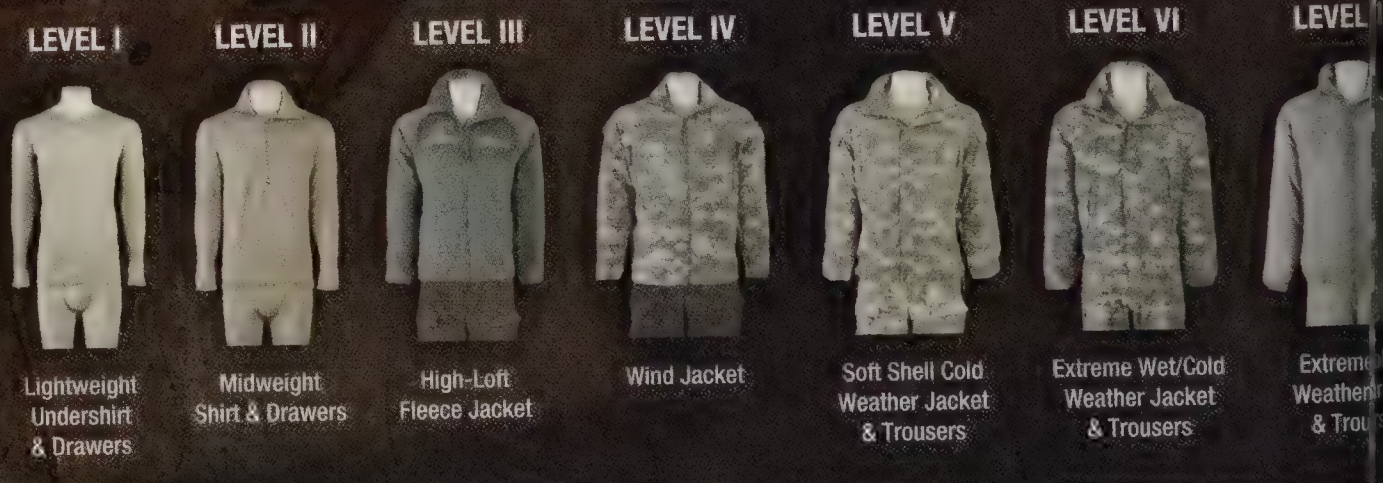
The Army began implementation of the first Army Congressional Fellowship Program, NCO Legislative Liaison ogram and an NCO Army Congressional Orientation Program in January. These three programs place senior NCOs Capitol Hill, working with and advising members of ngress and their staffs. The NCO Fellows Program is currtly a one-year assignment for two senior NCOs, who are assigned to the staffs of two U.S. senators to provide assistance to each senator's staff and associates while gaining an invaluable understanding of our government process and telling the soldier story every day. The Army will expand this one-year assignment by five months in FY 2010 to include a full-time graduate program, enabling those selected senior NCOs to complete a graduate degree while working on the Hill. The NCO Legislative Liaison Program is a two-year assignment for two senior NCOs to serve as legislative liaisons working in the House and Senate Liaison Divisions, Office of the Chief, Legislative Liaison. Both of these senior NCOs have already made significant contributions to the Army and our elected officials. The Army Congressional Orientation Program provides two senior NCOs the opportunity to tell the soldier story while working with the staffers who support senators and representatives. This program will enable us to involve many senior NCOs from across the Army, giving them the opportunity to experience and see our government at work, tell the soldier story, and return to their units with an understanding of how our Army meets the needs of our nation and the American people.

During this past year, I have had the distinct honor to meet face to face with many of our soldiers, our Army civilians and their families all around the world. The culture of innovation fostered by our young men and women continues to show the American spirit of ingenuity and commitment, even under the most challenging of environments. Soldiers represent what is best about our nation, and they work to build lasting relationships wherever they deploy and serve. Soldiers serving today are the greatest of their generation. We will feel the impact of their service for many years to come, just as we did with veterans throughout our 234-year history. Every generation has its heroes, and this one is no different. SFC Jared C. Monti is an excellent example of the heroism of the NCO. We are asking much from our soldiers and leaders at all levels of responsibility, and I am proud to serve in your ranks and stand shoulder to shoulder with each of you. Thank you for all that you do every day for our nation and for America's Army. Army Strong! ★



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Manpower and Reserve Affairs Supporting the Army And Our Nation

By Thomas R. Lamont
Assistant Secretary of the Army
(Manpower and Reserve Affairs)

As the Army's new Assistant Secretary for Manpower and Reserve Affairs (M&RA), I am proud to serve the soldiers, civilians, veterans, retirees and family members of our great Army. This job is one of the most important endeavors of my life.

The Army's primary job is to defend this great nation, and the Army draws its strength from its men and women. The Army today consists of more than one million soldiers (active, National Guard and Reserve), more than 270,000 civilians and approximately 213,000 contractors. Add to this more than 1.5 million dependents and more than 720,000 retirees and veterans, and you have a





LTC Robert Larsen, commander of the Baltimore Military Entrance Processing Station, administers the oath of enlistment to 28 new recruits during a swearing-in ceremony.

population of more than 2.7 million whose support is essential to the strength of our Army. While our Army is stretched and strained due to persistent conflict, it remains the best trained, best equipped and best motivated Army in the world.

My intent is to develop and lead initiatives that serve the Army's most valuable asset, our people. Working with our partners within the human capital core enterprise, M&RA will provide oversight and direction to the management of the Army's five components and meet the needs of the Army and the nation.

Our mission has never been more important than it is right now after eight years of continuous conflict. Army personnel are carrying a heavy burden. The Army leadership will work to reduce the strain on the force, and the Army community will continue to move forward. Our Army is stretched, but remains strong and resilient. Today's Army, including our families, is an example to the world of what an all-volunteer force serving a democracy is capable of accomplishing.

Over the past few years, with the support of Congress, the Army has increased the size of the force to reduce the hardships of repeated deployments on our soldiers and their families. After struggling through one of the most difficult recruiting environments since the all-volunteer Army was formed, we achieved hard-earned success in 2009. Halfway through the current recruiting year, the Army met its end-strength goal of 547,400 soldiers, and achieved this milestone nearly two years ahead of schedule. The prognosis for this year is that for the first time in many years we will reach or exceed all of the quality marks that we set for ourselves. By the end of this year, we predict that we will have already contracted for almost half of the fiscal year 2010 recruiting mission. We have been working with our elected leaders on the possibility of adding a temporary end strength of 22,000 soldiers to help our Army reach a better balance. Our challenge is to continue to recruit high-quality soldiers as the economy turns around and becomes stronger.

The overall health of the force—and the issues brought on by post-traumatic stress disorder (PTSD), traumatic brain injury (TBI) and stress—are major targets as we work to improve the delivery of medical services. M&RA is working with the Surgeon General of the Army to support soldiers, civilians and family members suffering from behavioral health issues, which have increased because of the pressures of multiple deployments and extended absences. These pressures have been particularly tough on our reserve component soldiers, who continue to play a major role in ongoing actions. The Army now leads the nation in an information campaign to reduce the stigma surrounding behavioral health issues and trains personnel to recognize the symptoms of TBI and PTSD. Our goal is to ensure that all new personnel programs, policies and procedures intended to destigmatize behavioral-health treatment are completely integrated into existing ones and that all parts of our Army are moving forward to solve the mental-health issues that we are currently facing. We will continue to partner with civilian medical experts, colleges and universities, and private indu



Thomas R. Lamont *is the Assistant Secretary of the Army for Manpower and Reserve Affairs. He is the former chairman of the University of Illinois Board of Trustees and a longtime Springfield, Ill., attorney and resident partner with three Chicago firms. He concentrated his practice in government law and legislation. In the public arena, Mr. Lamont served as assistant attorney general, executive director of the Illinois Board of Higher Education, and special counsel and adjunct professor of law to the University of Illinois. In the 1970s, he served as a counsel to the speaker of the Illinois House of Representatives. In 1990, Mr. Lamont was elected to the University of Illinois Board of Trustees. In addition, he served as a trustee of the state university retirement system, as a member of the Illinois Board of Higher Education and on U.S. Senator Carol Moseley Braun's judicial advisory committee. He is admitted to practice before the U.S. Supreme Court, the U.S. Court of Appeals for the Armed Forces, U.S. District Courts and Illinois State Courts. Mr. Lamont served as a judge advocate general in the Illinois Army National Guard for more than 25 years. He was the Illinois Staff Judge Advocate and retired as a colonel in 2007. Mr. Lamont received his bachelor's degree from Illinois State University and earned his law degree from the University of Illinois College of Law.*

try to seek out innovative ways to help our soldiers and their families. Some areas promise great returns, such as those using creative new technological approaches including telemental health and telemedicine.

President Obama recently announced another program that will enhance the military health-care system for soldiers: the joint virtual lifetime electronic record. This system will streamline the sharing of health-care records between DoD and the Department of Veterans Affairs (VA) and will ultimately contain administrative and medical information from the day an individual enters military service, continuing throughout his or her military career and after he or she leaves the military. As part of this effort, M&RA, in conjunction with the Office of the Secretary of Defense and the VA, is engaged in several pilot programs to help our soldiers as they make the transition from active/reserve duty to civilian status. The goal is to ensure that every soldier who departs the Army will do so with both a hard and electronic copy of his or her medical records. We are currently evaluating and testing prototypes at several Army entrance and separation points.

Department of the Army civilians are an important part of our overall workforce. In order to successfully complete its mission, the Army must maintain a robust, highly educated civilian workforce. The U.S. Army Civilian Human Resources Agency (CHRA) provides comprehensive human resources (HR) services, advice and support for the full range of HR functional areas. Recently, CHRA's workload has grown dramatically with Base Realignment and Closure, joint basing, in-sourcing, Army transformation and "Grow the Army" initiatives. The Army is now developing a concept plan, resourcing model and funding strategy to properly identify and support CHRA's requirements. Efforts are also under way to promote partnerships between CHRA and civilian human resources (CHR) accountability managers, develop and fund an effective training strategy, and streamline further CHR processes and authorities.



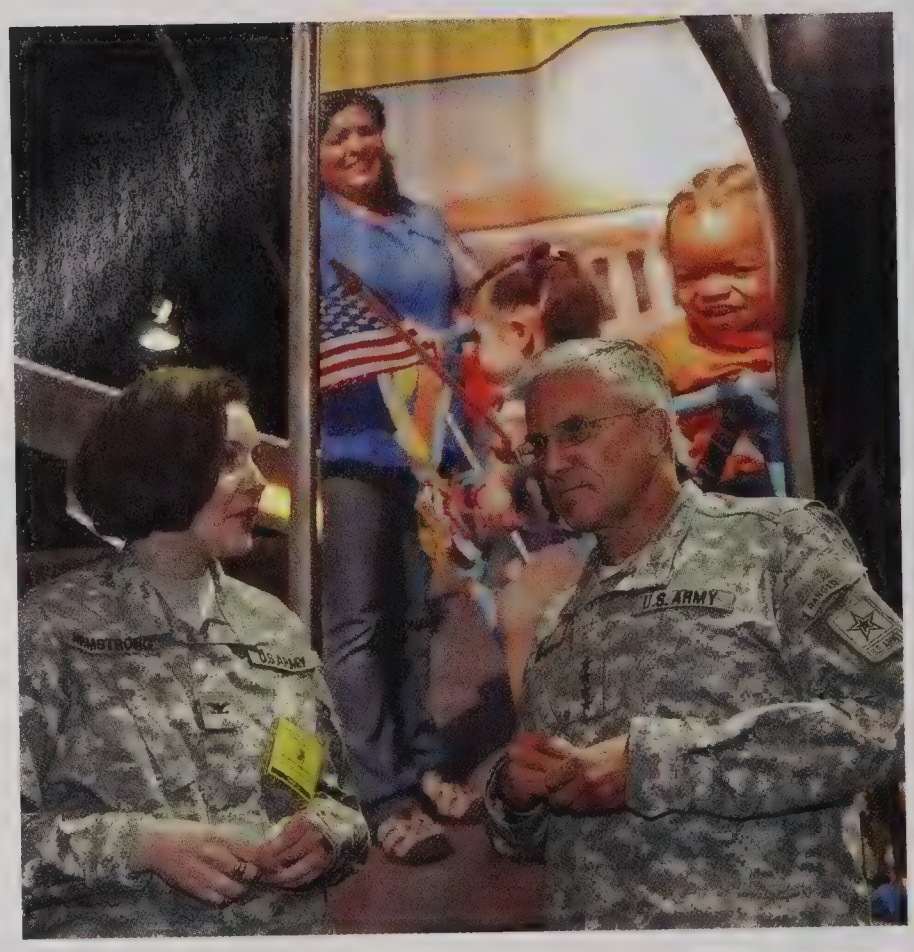
Beyond SPC Shane Brassell, an Army Reserve heavy equipment operator assigned to the 277th Engineer Company, 46th Engineering Brigade, work progresses on clearing debris in preparation for bridge building on the banks of a river northeast of Baghdad, Iraq.

In 2008, the Army filled more than 122,000 civilian recruit actions, nearly 50,000 of which were external hires new to the Army civilian workforce. In 2009, CHRA continues to develop strategies to support recruiting and staffing needs as the Army's civilian labor requirements continue to increase in mission-critical operations.

Currently, the Army has more than 4,100 civilians serving U.S. Central Command's area of operations. The Army's forward-deployed civilian workforce is essential to ongoing operations in the theater. Clearly the need for highly trained, mobile and motivated civilians has become essential to the success of today's Army. M&RA will continue to aggressively support initiatives to train and recruit a high-quality civilian workforce.

There is an old adage that states, "You recruit a soldier, but you retain a family." The past eight years have clearly demonstrated the strength of this statement. If we expect to recruit and maintain the quality force we enjoy today, it is essential that we ensure that the families of our soldiers are taken care of to the best of our ability. The Assistant Chief of Staff for Installation Management and Installation Management Command, with oversight from M&RA, is reviewing the seven major areas of the Army Family Covenant (AFC) to determine the efficacy of programs based on the requirements of the AFC. While the AFC is being evaluated, the Army is pursuing ongoing efforts to capture new data and to refine the metrics used in the evaluative process. These metrics will also provide input to the DoD common levels of support process as that evaluation matures. Our goal is to continue to provide the highest quality, caring support to the families of our warriors, regardless of location or component.

The Army Reserve, National Guard, and their families and employers have accepted greatly increased responsibility since 9/11. The Army has mobilized almost 600,000 Army Reserve and National Guard soldiers in support of overseas contingency operations and homeland defense missions. M&RA oversees the use of numerous authorities that access the reserve components in support of current operations. M&RA also reviews and approves all voluntary and involuntary mobilizations for Army Reserve and Army National Guard soldiers. These deployments have strained soldiers, families and employers. In order to maintain the support and confidence of this triad, M&RA





Right, Army Chief of Staff GEN George W. Casey Jr. discusses the Army OneSource web site with soldiers at the Installation Management Command booth during the 2008 AUSA Annual Meeting and Exposition. Below, Unit Family Readiness Groups such as this one at Schofield Barracks, Hawaii, help address the needs of soldiers and their families.

is exploring multiple areas in which we believe we can make fast and lasting improvements. Part of the solution will be the transformation of the Army Reserve and National Guard from a strategic reserve to an operational force. M&RA leads the overall effort in this area, and our goal is to ensure that all components achieve the strategic depth and operational flexibility needed to meet current mission requirements. Improvements in medical/dental readiness; pre- and postmobilization processes; and personnel, family and employer support allow reserve components to be ready and available for mobilization on a recurrent basis, while preserving the all-volunteer force and the citizen-soldier ethos. Enhanced medical access for reserve component soldiers and their families will be one of the keys to maintaining their viability and availability.

To provide the highest level of support possible to the families of reserve component soldiers, M&RA chartered a geographically dispersed task force (GDTF) to review the services that soldiers and families receive on military installations, and the services available to soldiers and families who do not live on or near installations. The goal of the task force is to provide a common level of support to all personnel, regardless of their location. The GDTF gathered feedback by visiting yellow ribbon reintegration events, attending reserve component training conferences, and conducting surveys and focus groups with stakeholders. Much time and effort was spent on speaking directly with the spouses and children of deployed soldiers. A final report will be developed that outlines variances, provides survey analysis, and recommends policy, regulatory or other changes that better support our dispersed soldiers and their families. Other ongoing efforts that assist these soldiers and families include Army OneSource—an online program that links dispersed populations with programs and activities—and virtual family readiness groups—online communities for family members to stay connected to their soldier's unit and other family readiness group members. My goal is to ensure that we maintain our support and commitmen to the families of our National Guard and Reserve soldiers as we continue to engage with the reserve components to come up with additional ways of providing higher levels of support to our families.

After nearly eight years of continuous conflict on multiple fronts, the Army remains deployed worldwide defending democracy while continuing to transform, modernize and realign our forces to meet current and future needs. This enduring state of conflict carries with it significant force structure and personnel challenges and places a lot of strain and pressure on our soldiers and their families. Maintaining the most successful and powerful all-volunteer army in the history of the world is an important and daunting task. How we treat our soldiers, civilians, families and veterans has and will continue to have a direct impact on our ability to maintain this force. My office will continue to lead the way in providing oversight and supervision as we transform our manpower, personnel, Reserve affairs, civilian management, contractor management and family support areas to meet the changing needs of the Army and our nation.



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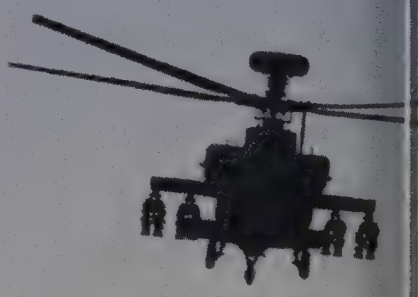
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—President Barack Obama, May 22, 2009

By Dean G. Popps
Acting Assistant Secretary of the Army
(Acquisition, Logistics and Technology)
and
Army Acquisition Executive

The Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology) is charged with performing a vital mission to meet the challenge set forth by the President: Guide the efforts of the acquisition community to equip and sustain the world's most capable, powerful and respected army. In the midst of a long-term ideological struggle with the forces of global extremism, now eight years underway, we are improving our capacity to carry out this mission today and tomorrow.



MRAPs

The men and women who form our acquisition



An MQ-1 Predator unmanned aerial vehicle makes a low approach as a second awaits takeoff clearance at Creech Air Force Base, Nev. The Predator can carry two Hellfire air-to-surface missiles along with cameras and synthetic-aperture radar. Unmanned aerial systems are a rapidly growing Army aviation capability, with nearly 1,000 of them now in Iraq and Afghanistan.

workforce serve under the direction of 11 program executive offices, two joint program executive offices, seven deputy assistant secretaries, one deputy for Acquisition Systems Management, three direct reporting units and several major subordinate commands of the U.S. Army Materiel Command. These professionals perform a wide range of responsibilities, which include research and development, program management, contracting, systems engineering, and development of Army-wide policy for procurement, logistics, chemical weapons destruction and demilitarization, research and technology, defense exports and cooperation, and many other areas. To expedite the development and delivery of vital warfighting systems and services, we are continuing to improve traditional acquisition processes.

At the same time, we are developing and institutionalizing new processes to improve effectiveness, efficiency, transparency, collaboration, and our overall ability to rapidly procure the equipment and deliver the technologies that our warfighters require.



***Dean G. Popps** is the acting assistant secretary of the Army for Acquisition, Logistics and Technology and the Army Acquisition Executive. In 2003, Mr. Popps was recruited to join the DoD Coalitional Provisional Authority (CPA) in Baghdad, Iraq, where he served as director of Industrial Conversion and worked to restructure the former regime's 52 military industry commission companies. Subsequently, he helped create the new Iraqi Ministry of Science and Technology and served as the CPA deputy senior advisor to that ministry until mid-2004. He also served on the CPA's Iraq Transition Planning Team in June 2004 and worked to transfer authority to the new Iraqi government. Prior to entering government service, Mr. Popps was a businessman, attorney and consultant. He founded the Dallas-Fort Worth Teleport and served as its chief executive officer for 15 years. He also served as chief operating officer of Communications Technology Management, Inc. He served on the Presidential Trade Mission to Greece and as an advisor on business development to Middle East heads of state. A graduate of the Potomac School of Law in Washington, D.C., Mr. Popps has worked in the District of Columbia criminal court system, the U.S. House of Representatives and the U.S. Senate.*

We are concentrating on the following critical tasks of strategic importance.

- Deliver materiel and services needed to provide warfighters with the decisive edge.
- Use the full potential of technology to empower soldiers.
- Continually improve and achieve excellence in our acquisition processes.
- Continually improve our capacity to design, develop, deliver, dominate and sustain.
- Use lessons learned to support the full range of Army modernization and equipping initiatives.
- Rebuild and rebalance the capability of the acquisition workforce.
- Improve our capability and capacity to articulate our strategic initiatives and compelling needs.

Two threads run through each of these initiatives: achieving excellence in acquisition programs and investing in people. Each plays a vital role in delivering the technology needed to ensure the dominance of landpower in the 21st century.

Enabling Army Modernization

Our belief that "we never want to send our soldiers into a fair fight" is at the core of the Army modernization strategy. Modernization is the key to ensuring that our soldiers, as part of joint and interagency teams, can: prevail in protracted counterinsurgency campaigns; help other nations build the capacity to deny terrorists access to their countries; support civil authorities at home and abroad; and deter and defeat hybrid threats and hostile state and nonstate actors.

We are working to ensure that our soldiers maintain a decisive advantage over any enemy they face. We are pursuing a strategy that rapidly fields equipment to the current force, upgrades equipment for soldiers going into combat and modernizes select systems; rapidly fields spin outs from our developmental base; and modernizes brigade combat teams (BCTs) and support brigades in a manner that fully ha

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nesses the Army force generation model. In every aspect of Army modernization, we are using the lessons learned from soldiers in the current fight, while working to provide soldiers what they need, when they need it.

Our commitment to our soldiers is evident in the management of more than 650 acquisition programs uniquely designed to meet joint and service requirements. The rapid fielding initiative process, for example, continues to provide an increasing array of state-of-the-art small-unit and individual protection equipment to our deployed forces. It also uses new technologies to maintain accountability for the millions of pieces of equipment fielded to units and individuals.

In the last 22 months, the Army has delivered more than 11,600 mine resistant ambushed protected (MRAP) vehicles to Iraq and Afghanistan, nearly 10,600 of which are in operational use. Our industry partners have met the technological challenge and evolved MRAPs from providing improvised explosive device (IED) protection to also providing explosive formed projectile (EFP) protection and to becoming smaller, lighter, more maneuverable IED/EFP-protected vehicles. The next evolution is the MRAP-all terrain vehicle, for which a contract was awarded in June, with initial delivery planned for this month.

Unmanned aerial systems are a rapidly growing Army Aviation capability. When Operation Iraqi Freedom began in March 2003, there were only six unmanned aircraft deployed in support of that mission. Today we have nearly 1,000 unmanned aircraft in Iraq and Afghanistan. It took the Army 13 years to accomplish the first 100,000 unmanned aircraft flight hours; it took us less than one year to fly the next 100,000 hours. We now surpass the 100,000-flight hour mark every year in theater.

We have made the transition from the Future Combat Systems (FCS) brigade combat team acquisition strategy to a BCT modernization strategy, in response to the fiscal year 2010 budget. This effort will result in the accelerated fielding of spin-out capability sets to all 73 BCTs by 2025, with technology derived from, but not limited to, that of the FCS program. We have halted the development and procurement of FCS manned ground vehicles and are defining requirements for a new ground combat vehicle program, using lessons learned from current operations and the technologies developed under the prior FCS program. We will also continue with an incremental development approach to the network. This acquisition approach will support the Army's shift to a modernization strategy focused on building a versatile mix of networked BCTs and enablers that use mobility, protection, information, precision intelligence and fires to conduct effective operations across the spectrum of conflict.

To assist us in developing this BCT modernization strategy, the Army recently conducted comprehensive ground combat vehicle-requirements analysis, while also convening a blue-ribbon panel of military experts to recommend the path forward for defining the capabilities for a new ground combat vehicle. Our goal is to field a new ground combat vehicle in five to seven years from contract award.

The most critical component of the BCT modernization strategy is the network. By growing the network in regular increments, we will provide our soldiers and their leaders with greater situational awareness and greater understanding of their complex battlespace, affording significant combat advantages.

The Warfighter Information Network-Tactical (WIN-T) is the transformational command-and-control communications system that provides the backbone tactical network for all Army operational units. The Army plans to deliver

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this capability to our soldiers using an incremental approach, synchronized with the development, deployment and sustainment of the joint tactical radio system and the Force XXI battle command brigade and below system. Increment 1 of WIN-T is now fielded to approximately 55 percent of the Army.

In addition to guiding the efforts to equip and sustain the force, we are charged with the chemical demilitarization mission to ensure that antiquated weapons are eliminated and the Army moves forward with comprehensive efforts to modernize its operations. Management of this important demilitarization mission through a coordinated program ensures that the full scope of environmental, safety, local and international concerns are addressed.

We are dedicated to the elimination of chemical agents in accordance with the Chemical Weapons Convention. We have nine chemical demilitarization sites throughout the United States, including three areas where operations are complete: Johnston Atoll; Newport Chemical Agent Disposal Facility, Ind.; and Aberdeen Chemical Agent Disposal Facility, Md. As of July, more than 60 percent of the stockpile had been destroyed.

We are also dedicated to building strong partnerships through international security cooperation programs. We are responsible for the management and oversight of Army export policy and technology transfer; international security cooperative research, development and acquisition programs; and security assistance programs to equip and train our international partners. U.S. Army foreign military sales alone have increased to more than $18 billion annually.

Rebuilding and Realigning The Acquisition Workforce

Our people are our most important asset. During the last decade, we witnessed a steady decline in the size of the Army acquisition workforce in the face of a wartime workload increasing in both magnitude and complexity. In the 15-year period prior to 2007, as the Army's contracting workload increased almost 700 percent, the contracting workforce decreased by 50 percent. The civilian and military members of the Army acquisition workforce now total approximately 41,000, down from a Cold War high of more than 100,000. Today this workforce manages roughly one-quarter of the Army's budget. In addition, during 2007, this workforce managed more than one-quarter of every federal dollar spent on contracted services.

Still, the approximate size of this workforce has not changed in seven years. In 2002, our program executive offices executed nearly $20 billion in budgetary authority and built a six-year base program of more than $140 billion. In 2008, these same people executed $85 billion, which included overseas contingency operations funding, and built a six-year base program of $170 billion.

For these reasons—to better support the Army's mission, enable our joint combatant commanders and alleviate stress on our people—we are rebuilding and rebalancing the Army acquisition workforce and better preparing our acquisition professionals to support joint, expeditionary operations. We are rapidly moving to increase the number of military and civilian contracting personnel to achieve statutory requirements to improve contracting operations. To achieve the Secretary of Defense's intent to "restore the Department's acquisition team ... to have adequate personnel capacity in all elements of the acquisition process," we are planning to increase the size of the acquisition workforce by 5,000 members, with roughly 3,000 new civil servants joining the force through contractor conversions. In sum, to provide the people required to manage a growing workload—and better support a modular, expeditionary Army and more rapid acquisition of materiel and services than at any time in its history—we must continue to invest in growing our workforce to establish a proper balance between people and workload.

In addition, we must continue to furnish incentives to attract and retain top-quality people. Working with Congress, the Department of Defense, and civilian academic and research institutions, we are developing initiatives to enrich the stature and career development of both military and civilian acquisition professionals. Simply put, we must sustain and increase investment in our workforce because without the right people, we cannot accomplish our mission.

Underwriting Victory

We are at a crucial time in the history of our nation. While some think that investing for tomorrow while waging war today incurs too much cost and too much risk, we disagree. To break the will of our adversaries and be victorious on distant battlefields, we must continue to modernize and transform.

Moreover, we must remain steadfast in our commitment to the core beliefs that form our credo.

■ *Our first responsibility is to the soldier* who protects and preserves our nation. More than one million strong—men and women, active and reserve—our soldiers are hardened by the effects of nearly eight years of war. As we enter a period of transition—a shift from major operations in Iraq to Afghanistan—we know they will face an increasingly complex and everchanging operational environment.

■ *Our second responsibility is to our acquisition workforce,* the men and women who work daily to ensure quality products for these soldiers. We are dedicated to attracting and retaining top-quality people who have the motivation and talent needed to excel in their work to equip and sustain the world's most capable, powerful and respected army.

■ *Our next responsibility is to our partners*—Army, joint, industry, international and academic. We must work closely with our partners to continually improve the collaborative relationships needed to enhance the overall quality and interoperability of the capabilities we furnish.

■ *Our final responsibility is to the American public.* We must be good stewards of both taxpayer dollars and the environment and remain committed to achieving the highest levels of effectiveness and efficiency possible through continuous improvement of our business processes. ★



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The Spirit of Innovatio

Maintaining a High Quality Of Life For Soldiers, Their Families & Army Civilians

By L. Jerry Hansen
Senior Official Performing the Duties of the Assistant Secretary of the Army (Installations and Environment)



The concurrent demands of persistent conflict, Base Realignment and Closure, global posture repositioning, reconfiguring to a modular force, escalating energy costs and environmental issues have presented our Army with unprecedented challenges of delicately balancing the forces required to meet these demands, while maintaining a high quality of life for our Army soldiers, their families and Army civilians. These challenges are driving the Army to lessen the financial burdens of long deployments, seek innovative ways to achieve energy security and efficiencies across the Army enterprise, practice good stewardship of our natural and cultural resources, and institutionalize sustainable practices in all Army operations and at all Army installations.



The Town Center at Fort Belvoir, Va., exemplifies mixed-use development, with family housing located above ground-floor commercial establishments.

To achieve these goals, the Office of the Assistant Secretary of the Army for Installations and Environment—OASA (I&E)—provides strategic leadership, policy and fiscal oversight. The OASA (I&E) staff works closely with the Office of the Assistant Chief of Staff for Installation Management (OACSIM) and the Installation Management Command (IMCOM) to: develop long-term strategies; balance funding requirements; forge necessary partnerships to ensure Army installations and family quality-of-life programs are appropriately sustained and enhanced; adapt infrastructure to meet installation and operational needs; and ensure that energy and sustainability are institutionalized across the Army.

With high operational tempo exacerbated by recent economic events, many soldiers and their families have incurred unusual financial stress associated with frequent deployments and moves. To mitigate those losses that qualify, the Army has sought and obtained additional funding for the homeowners assistance program (HAP).

With OASA (I&E) as the executive agent and the U.S. Army Corps of Engineers (USACE) as the administrator, HAP provides qualified soldiers, families and DoD civilians with mortgage assistance to mitigate financial harm, risk of foreclosure or potential bankruptcy that can result from the depressed real-estate market. Congress recently expanded HAP funding by $555 million in the American Recovery and Reinvestment Act of 2009. This increase in funding will partially cover the losses from the sale or foreclosure of the primary residence of wounded warrior homeowners who relocate to seek further medical treatment; surviving spouse homeowners of fallen warriors and DoD civilians relocating within two years after the death of the servicemember or employee; DoD civilians or members of the Coast Guard wounded during deployment with the armed forces on or after 9/11 and reassigned for medical treatment; and servicemembers permanently reassigned between February 1, 2006, and December 31, 2009. The program should benefit approximately 10,000 servicemembers and families.

The U.S. military is one of the nation's largest consumers of energy. In 2008, the Army alone spent more than $4. billion on fuel and energy. As it faces increasing operational requirements, environmental concerns and costs—but dwindling resources—the Army has embraced numerous complementary initiatives to reduce consumption, increase efficiency, and make greater use of alternative and renewable energy sources, while reducing greenhouse ga emissions and dependence upon petroleum fuels.

As a first step in meeting these challenges, the Army ha identified energy security and sustainability as high prior ties across all aspects of the Army enterprise. Energy secu rity, for the Army, includes preventing loss of access t power and fuel sources (surety); ensuring resilience in er ergy systems as they encounter disruption of service (surviv ability); accessing alternative and renewable energy source



L. Jerry Hansen *is the senior official performing the duties of the assistant secretary of the Army (Installations & Environment). He is also the senior Army energy executive, the deputy assistant secretary of the Army for Strategic Infrastructure and the project executive officer for the National Museum of the U.S. Army. His previous assignment was deputy inspector general for Policy and Oversight for the Department of Defense Inspector General. Mr. Hansen is a retired Army officer whose service included Vietnam, Germany, the Pentagon, and numerous troop assignments with the 1st Infantry Division, the 1st Cavalry Division and the 82nd Airborne Division. He was fire support division chief on the Army Staff during Operation Desert Storm following service as Army technical coordinator with the Office of the Undersecretary of Defense for Acquisition. He has a bachelor's degree from the U.S. Military Academy, a master's degree from Central Michigan University, a law degree from McGeorge School of Law, University of the Pacific, and is a graduate of the Industrial College of the Armed Forces and the Defense Systems Management College.*



As part of a plan to add 4,000 low-speed electric vehicles (LSEVs) over the next three years, the Army has ordered an additional 800 LSEVs like this one being used by Installation Directorate of Logistics.

The Army will build a 500-megawatt solar power plant at Fort Irwin, Calif.; it will be similar to this photovoltaic solar power facility at Nellis Air Force Base, Nev.



upply); providing adequate power to eet the demands of critical missions ufficiency); and promoting support r the Army's mission, its community d the environment (sustainability). meet these challenges, the Secretary the Army chartered a Senior Energy ouncil (SEC) made up of senior civil- and Army leaders that provides in- tutional oversight for the Army's en- gy security programs.

The SEC developed the Army En- gy Security Implementation Strat- y (AESIS) to guide the development energy policies and programs. The SIS establishes five strategic energy als and outlines a broad approach accomplishing them in the next cade. The strategic goals seek to re- ce total energy consumption, in- ase energy efficiency, increase the use of renewable and rnative energy sources, ensure access to sufficient en- y supplies and reduce adverse effects on the environ- nt. Energy security implementation plans under devel- ment across the Army enterprise are identifying specific ons to achieve strategic goals.

At the 2008 Association of the U.S. Army Annual Meet- & Exposition, the Secretary of the Army announced five ot projects that would serve as the catalyst for the ny's move toward a more secure energy future. These jects included development of a concentrated solar-ther- -electric production plant at Fort Irwin, Calif.; acquisi- of 4,000 small, low-speed electric vehicles to replace oline-powered vehicles for on-post use; demonstration biomass-to-fuel process; initiation of a 30 megawatt thermal facility at Hawthorne Army Depot, Nev.; and the establishment of a whole-base energy savings performance contract. These initiatives are progressing and are being closely evaluated for broader application across the Army. In addition, the Army has established a policy for insulating temporary structures (tents) in forward operating bases. This initiative is already reducing electricity requirements for such structures by more than 50 percent.

The Army has made great strides in enhancing and stabilizing our environment and safeguarding the health of soldiers, their families and Army civilians around the globe through the responsible management of more than 14 million acres of land across the continental United States, Alaska and Hawaii.

In the fall of 2008, using Global Reporting Initiative guidelines, the Army made history by releasing the first-of-its-kind Annual Sustainability Report. This vanguard

report highlights the environmental achievements and milestones in support of the Army's sustainability concept and goals, the Army's current accomplishments in sustainability and a baseline from which all future accomplishments can be measured. The report and more information on Army sustainability programs and initiatives can be found online at www.aepi.army.mil.

Nationally, the Army has received acclaim in public media for the numerous awards received in recognition of superior programs in sustainability and the protection of environmental and cultural resources at Army installations worldwide. These awards have been received from multiple organizations such as the Office of the Federal Environmental Executive, the U.S. Department of the Interior and the U.S. Fish and Wildlife Service.

In addition, the recognition achieved through these installation programs has helped the Army achieve an economy of scale that has benefited the service and the environment. For example, 99 Army installations combine to provide homes for 188 federally listed threatened and endangered species. In addition, through 2009, the Army compatible use buffer (ACUB) program has permanently protected more than 95,000 acres of training land at 29 separate installations. The Army is also currently working with 34 partners to establish encroachment buffers and conservation banks in the vicinity of Army installations, promoting biodiversity, protecting cultural heritage and optimizing the responsible use of land inside installations to support military readiness.

In December 2008, the Army's senior military leadership set forth the next critical challenge: institutionalizing sustainability in all Army operations. An Army Campaign Plan for Operational Sustainability will serve as the new paradigm for environmental projects at the installation level and in all Army operations. The institutionalization of operational sustainability in all Army planning, training, equipping and operations will better enable the Army to meet its missions and accomplish the Chief of Staff of the Army's four imperatives—sustain, prepare, reset and transform. In addition, this new paradigm will benefit the Army throughout its wide range of missions, from training and installation services through post-conflict stability operations. Finally, the application of operational sustainability will benefit the collective Army enterprise and establish sustainability as a primary ingredient of a trained and ready Army of the future.

To educate soldiers and the public on its rich heritage, the Army made great strides in 2008 towards the development of the long-awaited National Museum of the U.S. Army at Fort Belvoir, Va. In August and September 2008, the Army awarded separate contracts for development of the museum's exhibits and the building's architecture and engineering, respectively. In addition, the Army Historical Foundation (AHF), the Army's private fundraising partner for the venture, selected USACE as the construction agent for the project. Museum groundbreaking is anticipated by 2011, with a projected opening in 2013. An Army registry of all who have served is being developed by the AHF on its web site: www.armyhistory.org.



The National Museum of the U.S. Army, shown here in a conceptual design, will be built at Fort Belvoir partly with funds from the Army Commemorative Coin Act signed by President Bush last December.

Regardless of the Army's future operational demands, the OASA (I&E)—in partnership with OACSIM, IMCOM and other DoD entities—remains committed to mitigating the burden placed on Army soldiers, their families and Army civilians; maintaining a high quality-of-life standard; seeking innovative ways to improve the energy security and efficiencies across the Army enterprise; and practicing stewardship of the environment through the institutionalization of sustainable practices at Army installations worldwide.

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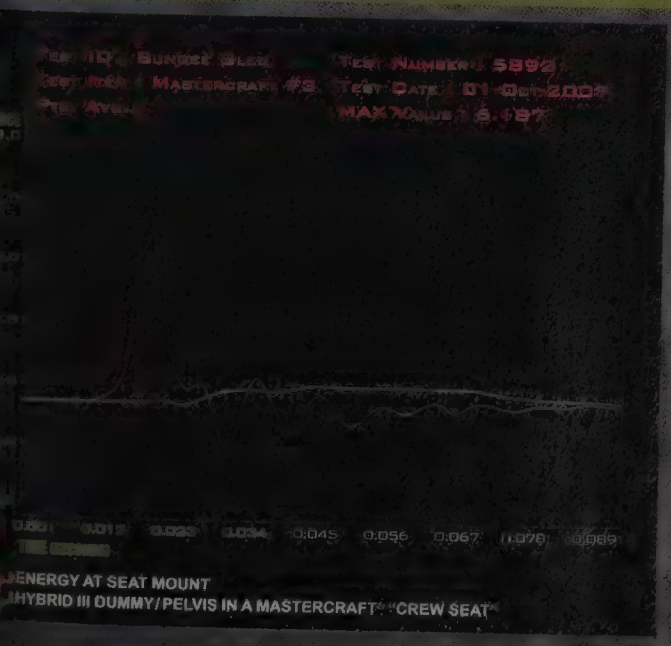








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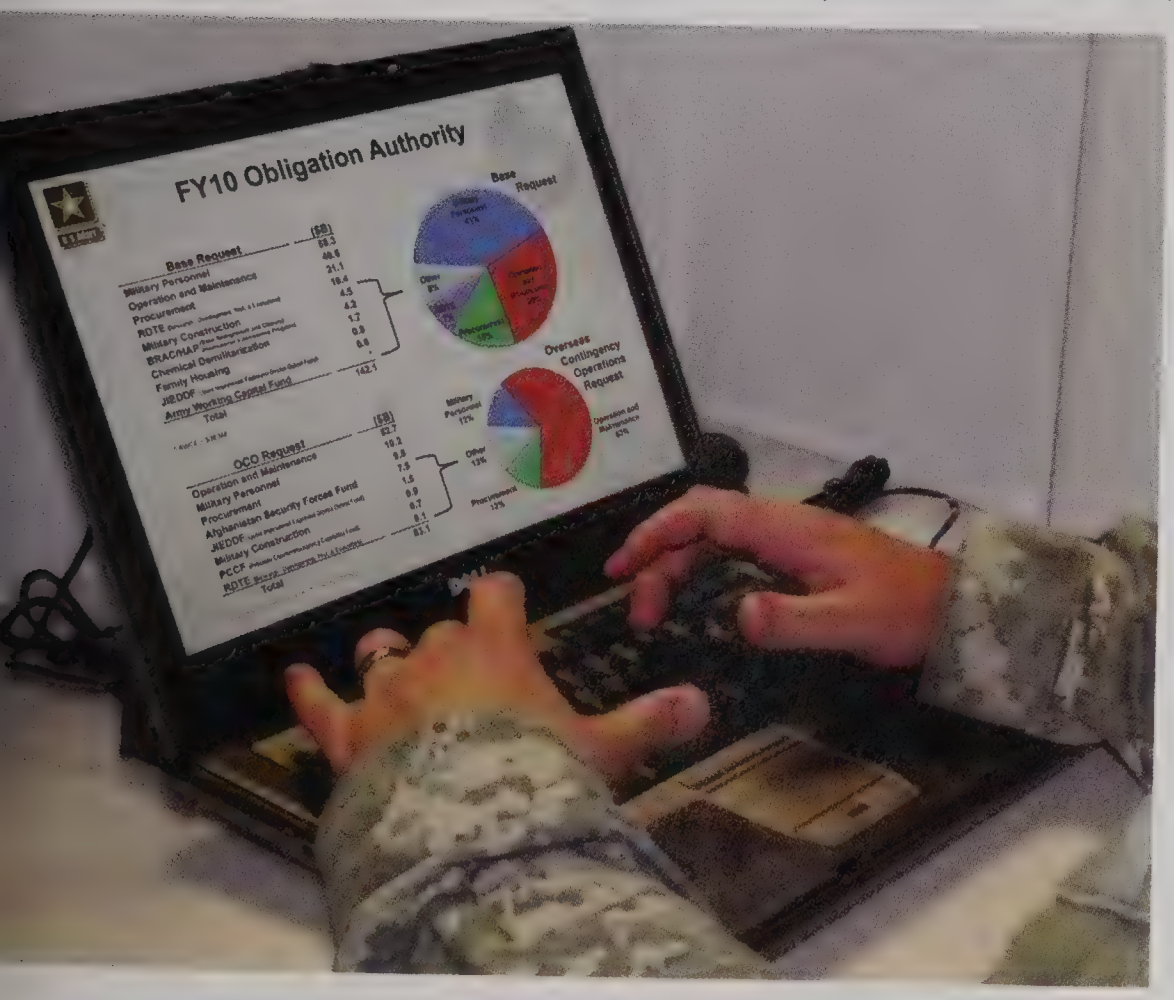
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Army Financial Management: Winning with a Cost Culture

By LTG Edgar E. Stanton III
Military Deputy for Budget
Office of the Assistant Secretary of the Army (Financial Management & Comptroller)

We have recently reached and passed through a significant crossroads in the ongoing cycle of defense budgets in the United States. Given the nation's current economic woes and the many increasing demands for taxpayer dollars, we can reasonably expect downward pressure on defense spending. Clearly, we have entered a period of leaner fiscal conditions. Are we in the Army prepared for this change?

For the Army to be successful in a leaner fiscal environment, we must dramatically alter our approach to spending. Fulfilling the mission will always be the top priority, but now cost consideration must also play a substantial role.



We must inculcate a "cost culture" throughout the Army. The idea is pretty basic: During the



Military Deputy for Budget LTG Edgar E. Stanton III and then-Acting Director of the Army Budget William H. Campbell brief the press in May concerning President Barack Obama's fiscal year 2010 budget proposal for the U.S. Army.

decision-making process, take cost into account. It is not an intrinsically novel idea—most households operate according to this simple principle. Typically, however, the Army has not put cost consideration at the forefront of decision making. Rather, the Army's requirements-oriented culture has defined financial success as spending every appropriated dollar to meet the mission. Further, the Army has not done a good job of relating cost to outputs and outcomes because it is rarely asked to do so: There is no penalty for excessive cost, no reward for decreased cost. Adopting a cost culture will reverse these attitudes and practices.

The first element of a cost culture is establishing an enterprise mind-set, a process already under way. The enterprise mind-set directs us to think and to act as a single entity—as opposed to many disparate pieces and parts—focusing on what is best for the entire Army, not just what is best for any given organization. This will require us to abandon "rice bowls" and "stovepipes," and to take a holistic view of objectives and processes.

The second element of a cost culture is incorporating cost accounting, cost analysis, cost control and cost planning—collectively known as cost management—into all activities at all levels. This means that examining and considering cost becomes a standard part of decision making. Instilling cost-management practices at every level of Army decision making undoubtedly will take time, but we expect to make great strides in doing so in fiscal year (FY) 2010. For example, each meeting of the Army Enterprise Board (AEB) already incorporates a strategic resource update. This helps senior leaders to understand and appreciate the resource implications of their strategic choices. In addition, the Office of the Assistant Secretary of the Army (Financial Management and Comptroller) (FM&C) is setting cost-management metrics to support AEB strategies and performance objectives. An FM&C cost analyst has been assigned to each of the Army's core enterprises to develop these metrics.

The Army also intends to modify the planning, programming, budgeting and execution process to take cost into account at key points before requirement decisions are made. In addition, we are developing a cost structure and model that will capture the full cost of all Army organizations, the products and services they produce, and the customers they support.

To be most effective, the concept of cost culture must be imbued across the breadth and depth of the Army. Cost culture will not be limited to headquarters or the garrison; every theater of operations also will be required to follow its principles. Already, cost and budget analysts and accountants have been embedded into U.S. Army Central financial management units in Iraq, Kuwait and Afghanistan to provide commanders with more cost visibility and to help them incorporate cost modeling and analysis into the requirements definition process. These analysts are reviewing Coalition Acquisition Review Board resource proposals and determining true requirement costs. They have evaluated why capabilities requested by the command cost the amount they do, determined what they should cost and proposed alternatives based on cost to achieve the same result. Such invaluable information enables senior leaders to understand the near- and long-term cost implications of their decisions, to make effective trade-off decisions to achieve the best use of limited resources and, we hope, to reduce the cost of operations. We expect this cost-culture methodology will be an integral part of all future operations.

Understanding and using cost data admittedly are ac



LTG Edgar E. Stanton III *assumed his current assignment as the Military Deputy for Budget on July 24, 2008. He has served in a wide variety of positions, including director for Army Budget; chief of disbursing; chief of pay and examination; chief of accounting; executive officer with the 8th Finance Section in Landstuhl, Germany; commandant, U.S. Army Finance School, Fort Jackson, S.C.; and commanding general, 336th Finance Command, in support of Operation Iraqi Freedom, Combined Forces Land Component Command, Camp Doha, Kuwait. He holds a bachelor's degree from The Florida State University and a master's degree from the Naval Postgraduate School. His military education includes the Finance Officer Basic and Advanced Courses, the Army Command and General Staff College, and the Army War College.*

quired skills, and the Army recognizes that we must build cost competency among all personnel. Curricula for military and civilians in every branch and career program, from the very earliest stages of service to the most senior positions, will be modified to include "cost classes."

Soldiers perfect their warfighting craft through repeated training and exercises, which are then dissected during a hot wash and subsequent after action reviews. This approach will serve us well in developing and implementing a cost culture. Essentially, we review actions and operations to understand what worked and what did not, comparing the plan to what really happened in order to understand the difference, for better or worse. Leaders and soldiers can use that same open collaborative process to implement a cost culture. The Army is looking for a flow of creativity; everyone has a role in finding ways to be more cost-conscious while achieving the mission.

Collecting, managing and properly interpreting the vast quantities of data needed for a successful cost culture will depend heavily upon technology. In particular, the Army expects the general fund enterprise business system (GFEBS) to be an essential component of the process. GFEBS tracks how funds are being used across the enterprise, down to the processing of each transaction. A web-based system, it integrates funding, real-property management, financial, cost and related output and performance data, and it offers real-time data visibility to the active Army, the Army National Guard (ARNG) and the U.S. Army Reserve (USAR). When fully deployed, GFEBS will be one of the world's largest government enterprise financial systems, with more than 9,000 end users at more than 200 Army sites around the world. It will provide complete accountability of all general funds—in excess of $140 billion in annual spending by the active Army, the ARNG and the USAR.

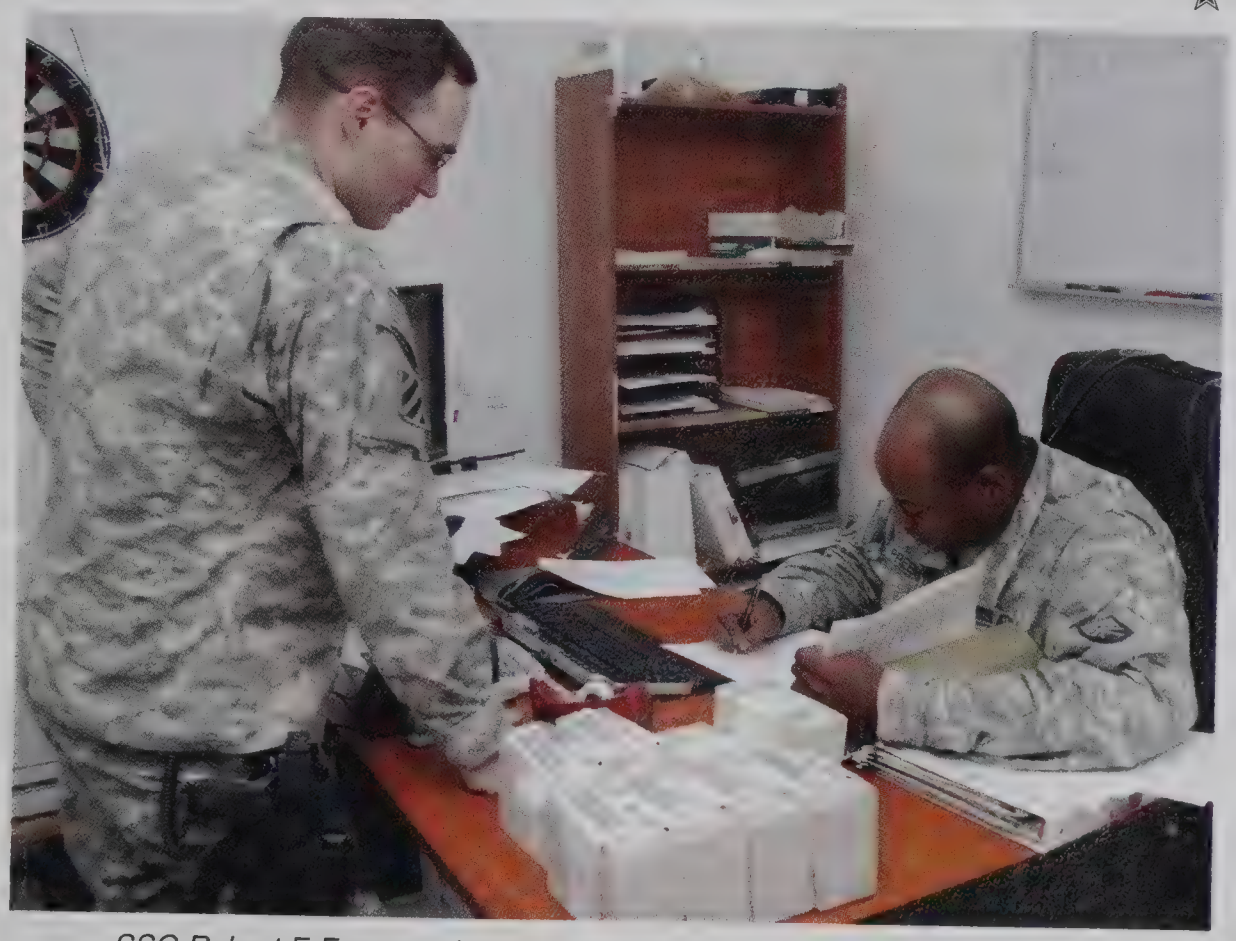
GFEBS' ability to link real-time costs with operational and functional outcome data will enable leaders and managers to identify cost performance differences and to make best-value and cost-practices decisions. We expect it will affect everything from daily garrison operations to the planning, program development, and budget formulation and execution processes.

GFEBS is being implemented in waves based on regional locations, installations, organization activities and reporting relationships. In addition, the Dynamic Army Resourcing Priority List and the schedules of other enterprise resource-planning implementations and initiatives such as Base Realignment and Closure have been taken into account. Initial functionality was achieved with the first release in October 2008 at Fort Jackson, S.C., and seven other sites. This affected 250 system end users, transformed more than 400 business processes across six major process areas, converted more than 400,000 master data records and provided the Army's first-ever cost-management structure.

In April 2009, the Army's Program Executive Office Enterprise Information Systems deployed another GFEBS wave to more than 1,500 users in the continental United States, achieving full functionality at Fort Jackson and Forts Stewart and Benning, Ga., and limited functionality at Headquarters, Department of the Army; Headquarters, Installation Management Command (IMCOM), IMCOM Southeast Region; Headquarters, U.S. Army Training and Doctrine Command; Headquarters, U.S. Army Forces Command; and Defense Finance and Accounting Service offices in Indianapolis, Ind., and Rome, N.Y.

GFEBS was granted a favorable Milestone C acquisition decision in May. Two more mini-deployment waves are scheduled for this month and January 2010, followed by a major deployment wave in April 2010. The Army expects to complete GFEBS deployment in FY 2012.

Everyone agrees the Army is fully engaged right now, probably more than we have ever been in our 234-year history. Asking people to work harder is not the solution, but we will ask them to work smarter and to embrace the concept of cost culture. Cost management is one of the best tools available to us, and Army senior leadership believes it will help to inspire the creativity that has always been a hallmark of our soldiers and civilians. When cost culture becomes integrated into every aspect of our thinking and actions, our Army will become a better, more efficient and more effective organization. ★



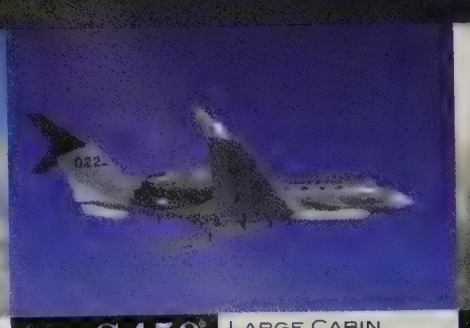
SSG Robert F. Freeman (seated), the disbursing agent for Detachment A, 106th Financial Management Company, distributes funds for mission-related purposes to SSG Joshua Bundy, team leader for Company A, 415th Civil Affairs Battalion, at Forward Operating Base Rustamiyah, Iraq.

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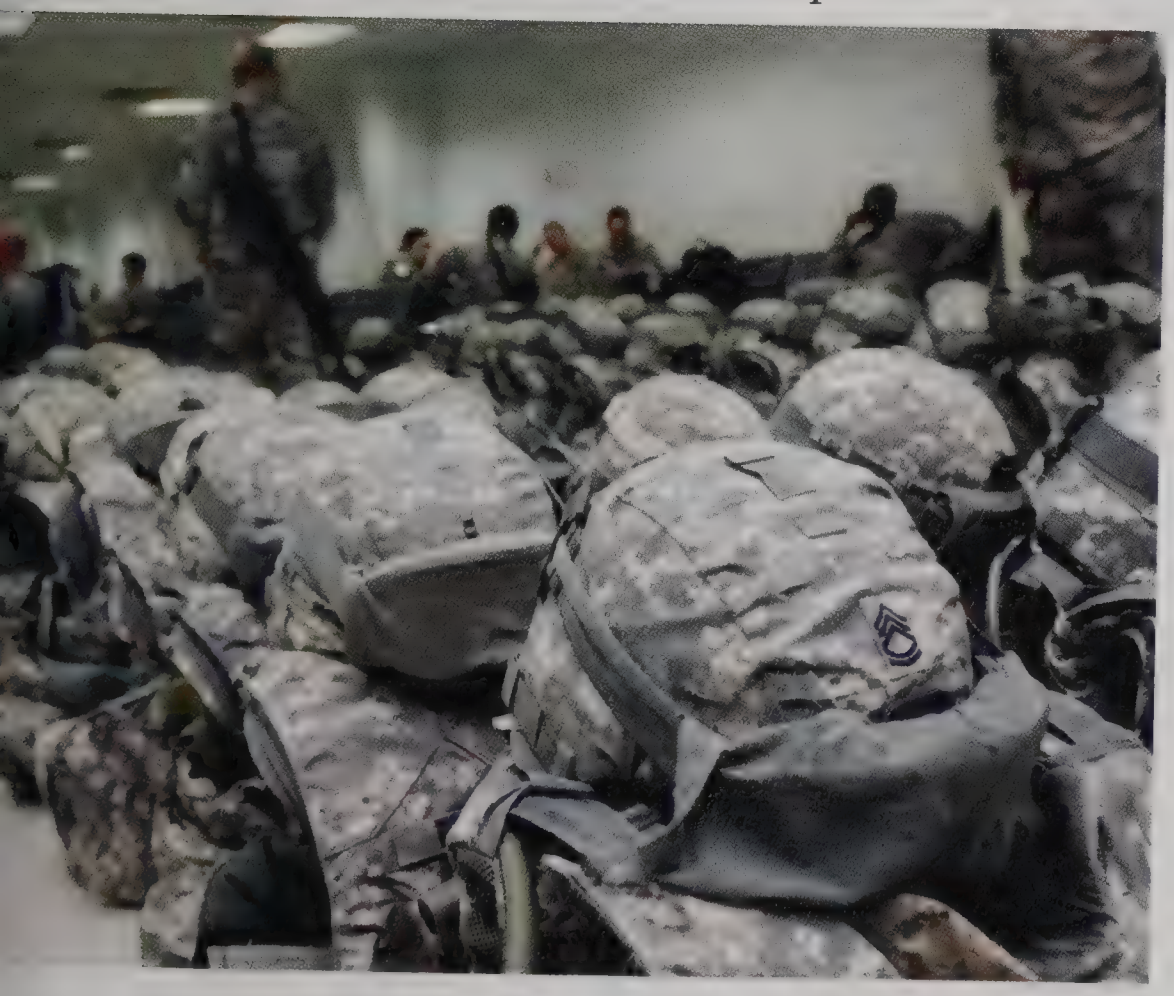
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Institutional Adaptation

Improving Army Force Generation

By GEN Charles C. Campbell
Commanding General,
U.S. Army Forces Command

In support of the Army's transformation imperative, Secretary of the Army Pete Geren and Army Chief of Staff (CSA) GEN George W. Casey Jr. signed a memorandum in January that defined the three major elements of the Army's institutional adaptation effort: improving Army force generation (ARFORGEN), adopting an enterprise approach, and reforming the Army's requirements and resourcing processes. As the Secretary and the CSA explained, institutional adaptation is the final but essential step in our transformation from a Cold War Army to an Army that is dominant across the spectrum of conflict in the 21st century. Given the magnitude of this undertaking, every soldier and Army civilian has a role to play in transforming the institution for an uncertain future.





Refurbished after 15 months in theater, Strykers of 4th Brigade, 2nd Infantry Division, line the motor pool in late January at Fort Lewis, Wash. With reset complete, the brigade began preparing for another deployment to Iraq in the fall.

In the June issue of ARMY Magazine, I described ARFORGEN as both the rotational model and process we use for producing progressively ready forces for cyclical deployment, provided the rationale for the necessity of this new force generation approach, and articulated the changes we have made to ARFORGEN as we continue to refine the model and the process.

U.S. Army Forces Command (FORSCOM) is decisively engaged in two of the three aspects of institutional adaptation—improving ARFORGEN and adopting an enterprise approach. The primary problem confronting institutional adaptation is straightforward: Legacy policies, processes and procedures associated with the linear force-generation model are in tension with the rotational force-generation model we use today. While much has been done to reconcile this tension, there are a number of critical institutional changes we must undertake in order to realize the Secretary and CSA's shared vision of our 21st-century Army.

More than seven years of persistent conflict has compelled the operating force to undertake rapid and transformational change that has outpaced the generating force. This has created a significant number of "gaps" internal to the Army that are manifested most prominently in disconnects between the generating force and the operating force and impede optimal execution of ARFORGEN.

To improve ARFORGEN, the critical first step is to adopt an enterprise approach by realigning the generating force Title 10 functions to comport with and support the Army's core process, ARFORGEN. An enterprise approach is one that empowers leaders to take a holistic view of organizational objectives and processes in order to act cohesively for the good of the entire organization and to achieve outputs with greater efficiency. To advance the enterprise approach, the Army is organizing four functionally oriented core enterprises (CE): materiel, human capital, services and infrastructure, and readiness.

FORSCOM is collaborating with the Army's enterprise task force to establish the readiness core enterprise (RCE), which is responsible for efficiently managing and executing the ARFORGEN process. As the supported core enterprise, the RCE sets priorities and synchronizes other CE outputs to accomplish the ARFORGEN outcome, which is to provide trained and ready forces to combatant commanders. A key ARFORGEN tenet requires that a supporting core enterprise make delivery of an "output"—which constitutes an "input" into the process—at the prescribed place and time in order to best support the senior commander. Doing so will generate efficiencies, enabling the enterprise to change the systemic delivery of outputs from "fast, good and expensive" to "fast, good and affordable." This is a major change in the culture of our institution.

In June, the RCE hosted a CSA-directed, enterprise-wide reset rehearsal of concept (ROC) in Atlanta, Ga. Reset is designed to rebuild soldier, family and unit readiness consumed in operations by restoring personnel and equipment levels necessary for future missions. Today unit readiness is achieved inefficiently and at great expense immediately prior to deployment. This occurs principally because the enterprise has been unable to synchronize staffing and equipping functions with the ARFORGEN cycle, forestalling effective collective training. The ROC dri



GEN Charles C. Campbell *is the commanding general of U.S. Army Forces Command (FORSCOM). Before that, he was the deputy commanding general of FORSCOM, after serving as the commanding general of Eighth Army, Republic of Korea. GEN Campbell earned his commission through ROTC at Louisiana State University. He served as the commander of a special operations A-detachment in Vietnam, an armor battalion in the 3rd Armored Division, a mechanized brigade in the 2nd Infantry Division and as the commanding general of the 7th Infantry Division. He has extensive combined arms and Joint command and staff experience. His Army and Joint staff experience includes service as a plans and operations officer, Combined Field Army, U.S. Forces Korea; chief of staff, U.S. Central Command; and chief of staff, United Nations Command/Combined Forces Command/U.S. Forces Korea. GEN Campbell has a master's degree in military arts and science from the U.S. Army Command and General Staff College and is a graduate of the Army War College.*

revealed the need for tailoring unit reset metrics to account for variable periods of dwell. The period that begins prior to a unit's redeployment and continues through the end of the reset force pool will be managed through a new reset support and resourcing conference, a corollary process to the training support and resourcing conference.

The Army must ensure that leaders have sufficient directive authorities to establish priorities for their respective CEs to produce outputs crucial to and synchronized with ARFORGEN execution. When we speak temporally of ARFORGEN execution, we mean those activities and plans that span the current fiscal year and the next fiscal year—known within the ARFORGEN process as the "execute year" and the "verify year."

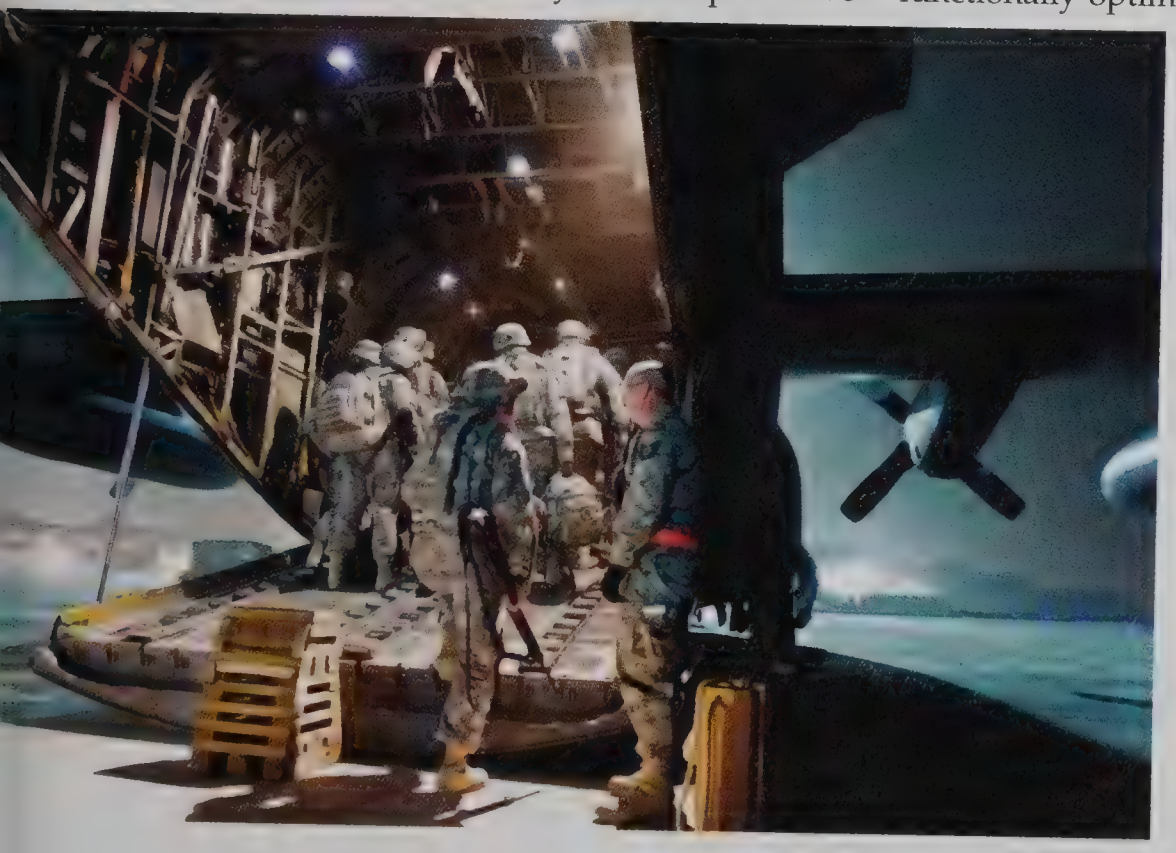
At the installation level, the senior commander is the primary synchronization and execution agent for all ARFORGEN activities: leading, staffing, equipping and training. As the general officer with the responsibility and authority for providing Title 10 support to both tenant- and mission-assigned units, the senior commander is central to the entire ARFORGEN process. The Army is working to codify this important function in applicable regulations. Also, to support the senior commander, we have organized mission support elements at all FORSCOM-led installations. These organizations have proven to be essential in every aspect of Title 10 support to continental U.S.-based operating forces, particularly during the frequent and lengthy periods when the senior commander and his mission staff are deployed.

Another impediment to optimal execution of ARFORGEN is the lack of an information-enabled common operating picture of the dynamic and complex data and metrics essential to building and sustaining readiness. To satisfy this gap, FORSCOM has developed and is implementing the ARFORGEN synchronization tool (AST). The AST, which is nested with the enterprise management decision support tool, holds real promise in providing the information needed for the enterprise to make substantial improvements in executing ARFORGEN. AST has a collaborative, analytical and predictive capability that will greatly streamline processes that heretofore have been done using manual analog tools.

We are also reforming our reporting system to facilitate a more accurate measurement of the readiness to accomplish both a unit's core functions and its assigned missions. Over the last several years, the Army has reported unit readiness along two lines. First, through the conventional wartime mission reporting system, or unit status report for core missions; second, through an ad hoc system developed to accommodate reporting for directed missions, or percentage effectiveness for directed missions. Army Regulation 220-1 is currently undergoing revision to reconcile this gap that veils the institution's ability to "see itself," especially within ARFORGEN. We must continue to refine the reporting system, however, to account for the complex relationship between the unit mission-essential task list and readiness reporting guidance, and the associated implications for force design and Army programs.

The Army Staff is inextricably drawn into day-to-day execution of ARFORGEN. This is a function of responding to the Joint Staff's participation in force provision outside the normal global force-management process and of the requirements associated with managing the direct reporting units (DRUs). The number of DRUs aligned to the Army Staff (ARSTAF) increases structural complexity, which encumbers the ARSTAF's ability to conduct strategic-level planning and has resulted in the loss of four-star advocacy for the DRUs. Consequently, the ARSTAF's focus on ARFORGEN execution frequently results in centralized decision making that occasionally is not fully informed by enterprise-wide equities. As the CSA's vision for the enterprise approach is realized and the global force-management process matures, the Army Staff will be able to shift its focus to years three through five of the ARFORGEN planning horizon, and execution decision making will eventually become more decentralized to the appropriate core enterprise.

Much of the generating force is organized in ways that are functionally optimized for the "silos" but suboptimized for the enterprise. The silos have been organized to best produce a particular output, even though that output may or may not be synchronized with and satisfy the priorities of an expeditionary and campaign-capable Army that is progressively readying and cyclically deploying modular units from across the components. Each of the generating force silos, therefore, must transform its structure to im-



Soldiers of the 100th Brigade Support Battalion load onto a C-130 aircraft as they prepare to leave Joint Base Balad, Iraq, in March. The unit was repositioned from Iraq to provide logistical support in Afghanistan.

prove relationships with the four CEs and to rationalize and synchronize their outputs with the ARFORGEN process. Indeed, the generating force silos are now undertaking substantial effort to change legacy paradigms and thereby enhance the ability of the silos to support the operating force.

To account for modularity and implementation of ARFORGEN, Forces Command has transformed its command-and-control (C2) approach. Importantly, FORSCOM has codified a new C2 concept, training and readiness authority (TRA), which is the authority a FORSCOM operational commander exercises for matters affecting the training and readiness of his units. TRA is not bound by geography and is an inherent command authority delegated by the FORSCOM commander. In particular, readiness of attached subordinate functional and multifunctional units has benefited from TRA, despite those units being stationed on installations away from their parent headquarters. Aligning all continental U.S.-based conventional, rotational modified table of organization and equipment structure to the RCE will allow commanders to use TRA to immeasurably improve the readiness of an Army that is in motion and facilitate ARFORGEN efficiency.



PFC James Kelley, Company C, 3rd Squadron, 61st Cavalry Regiment, 4th Brigade Combat Team, 4th Infantry Division, scans a mountainside for potential threats as SPC Andrew Ewart provides security in Nishagam village, Konar Province, Afghanistan. Soldiers from the unit spoke with villagers about potential voting sites.

Today the reserve components (RCs) are being employed as part of the total force but without benefit of being fully operationalized. An operationalized RC is defined as conventional forces that are staffed, trained and equipped to be available for mobilization and employment as cohesive units in order to execute operational and operational support missions on a recurrent, cyclical basis in accordance with ARFORGEN while preserving the citizen-soldier ethos. To realize this objective, the governing statutes and policies that remain in force from the Cold War model of using the RC as a strategic reserve must be updated to reflect today's condition of persistent conflict.

Nonetheless, we have implemented improvements that lie within the authority of the Department of the Army, and, consequently, our Army National Guard (ARNG) and U.S. Army Reserve units have achieved post-mobilization readiness levels in less time than at any point in this conflict. As a cumulative effect of cyclical deployments, the Army's pre- and post-mobilization training order, and recommendations from a number of studies, we have reduced post-mobilization training time for ARNG combat brigades by about 81 days over the last eight years. In support of RC readiness, First Army is fundamentally transforming to improve ARFORGEN efficiency by adapting its training support strategy, consolidating mobilization training centers, and reorganizing to comport with the recently completed Mobilization Tiger Team findings and recommendations. Fully operationalizing the RC will provide the Army with operational depth and the nation's leaders with strategic flexibility to deal with 21st-century threats.

Finally, we must balance today's combatant commander requirements and the effects that persistent conflict are having on the long-term health of the all-volunteer Army with the imperative to achieve sustainable, predictable tempo and increased dwell. Congress, the Department of Defense and the Department of the Army have provided our senior commanders with a level of funding for soldier and family readiness programs that is unprecedented in the history of our Army. The capacity of these new programs is not properly aligned to support units in ARFORGEN, however. The Services and Infrastructure CE, in coordination with senior commanders, must create the institutional agility to maneuver this capacity to requirements based upon ARFORGEN-informed priorities.

During last year's AUSA Annual Meeting, I chaired a panel composed of senior Army leaders who have significant roles in executing ARFORGEN. This panel provided the broader Army community with a report on how we have improved ARFORGEN since its implementation in 2006. Today we continue to improve ARFORGEN within the Secretary of the Army and CSA's construct for Army transformation and institutional adaptation. Improving ARFORGEN ultimately means closing the gaps between the generating force and operating force by making routine those adapted institutional processes and procedures needed to progressively ready and cyclically deploy trained and ready forces for full spectrum operations. Freedom's Guardian!

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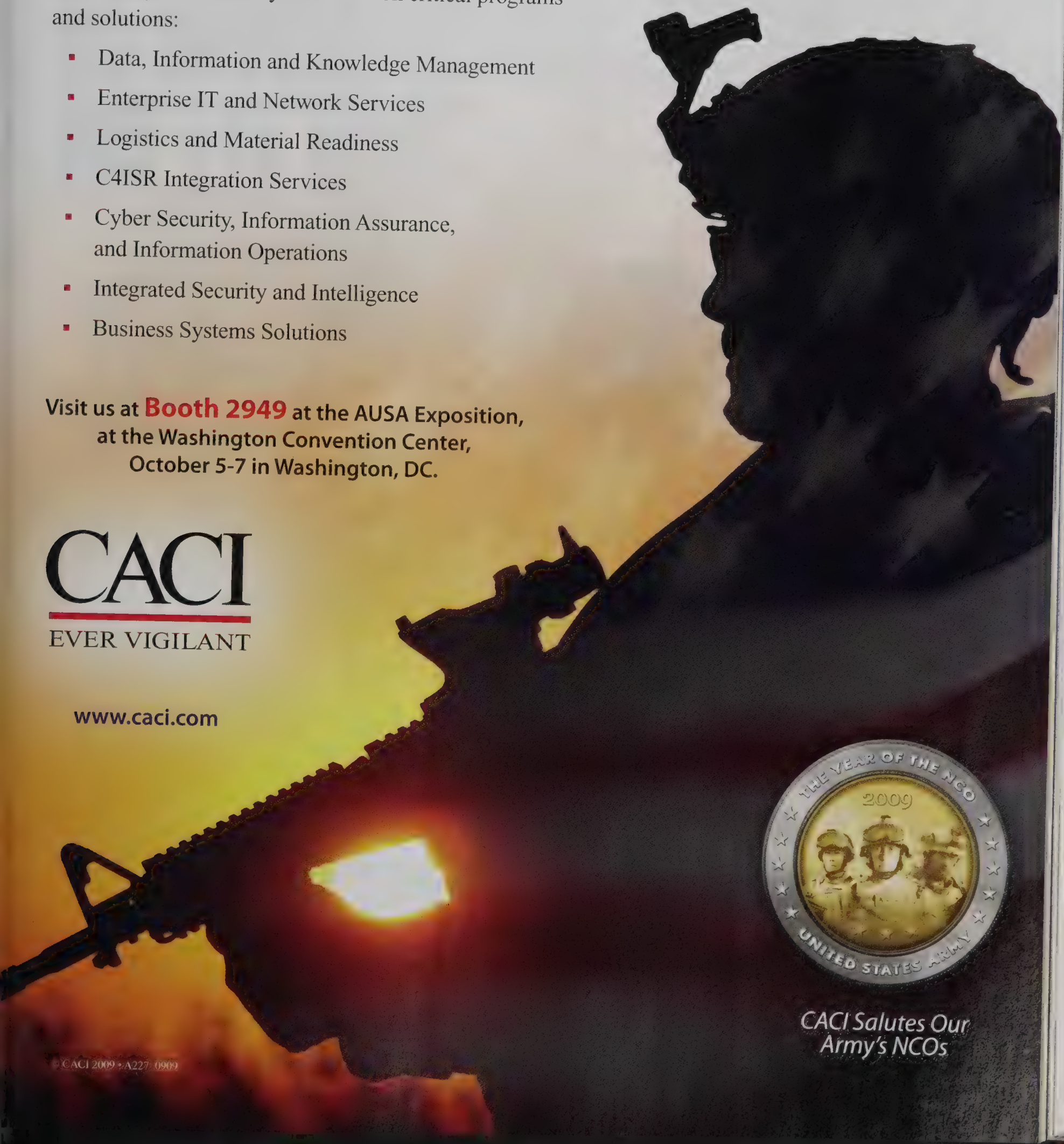
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Building Balance and Versatility For a Campaign-Quality, Expeditionary Army

By GEN Martin E. Dempsey
Commanding General
U.S. Army Training and Doctrine Command

Just before the National Football League draft in April, *USA Today* ran this front-page headline: "As pro football evolves, hybrid players step up. Wide-open offenses, prospect of longer schedules fuel demand for more versatility." Extending this logic, teams with the best balance on offense, defense and special teams are always the most flexible and toughest to beat. Despite football's obvious differences from the Army, the same qualities of balance and versatility are necessary in developing a campaign-quality, expeditionary Army.



The challenge before our Army today is building balance and versatility into the force through our leaders and organizations, and by generating



U.S. Army Cadet Garret Rinaman, in the final phase of parachute training with Company B, 1st Battalion (Airborne), 507th Parachute Infantry Regiment, ruck marches out of the drop zone area after his third jump at Fort Benning, Ga., in July.

institutional capacity and flexibility as we face future uncertainty, complexity and the new norm of persistent conflict. U.S. Army Training and Doctrine Command (TRADOC) is meeting this challenge head-on.

Three imperatives are guiding our efforts to more effectively align the operational and institutional Army to meet the demands of current and future requirements and support the Army force generation (ARFORGEN) model: Develop our military and civilian leaders; Provide trained and ready forces to support current operations; Integrate current and emerging capabilities. These imperatives will remain for the foreseeable future and thus require our determined effort to bring them into balance.

Leader development remains TRADOC's number-one priority; therefore, implementation of the Army's leader development and human capital strategies is also our primary task. Our initiatives within the human capital enterprise will enable TRADOC to pursue adaptations to Army policies and programs that affect leader development with the intent of achieving greater flexibility and predictability in both personnel policy and professional military education. To more effectively lead capabilities development in all domains, including training and leader development, TRADOC has initiated a review and update of Army operational concepts to capture the context and challenges of future armed conflict. Our view in these concepts is that in an era of persistent conflict, we need to think differently about how we develop our leaders. Our leader-development strategy and implementation plan will integrate all dimensions to ensure that we balance education, training and experiences for our leaders across the force. We will also provide recommendations to existing leader-development models, personnel policies and functional competencies for all components and across all cohorts.

Our leader-development strategy does not define a specific end state. Rather, it seeks to be as adaptive and innovative as the leaders whose development it will guide. The strategy is based on Field Manual (FM) 6-22 *Army Leadership* and delivers the leader qualities described in our doctrine FM 3-0 *Operations*, the capstone concept for joint operations, and the update of the Army capstone concept. The strategy covers the broad leader qualities in our doctrine and identifies specific outcomes to be achieved during the course of a career.

As our nation's campaign-quality force, the Army must prepare leaders to execute missions over extended campaigns. Current operations clearly demonstrate that campaigns mean time, time means change, and change require



GEN Martin E. Dempsey *assumed duties as commander of U.S. Army Training and Doctrine Command last December. Before that, he served as the deputy commander, and then acting commander, of U.S. Central Command. During the previous two years he commanded Multi-National Security Transition Command-Iraq. GEN Dempsey also commanded the 1st Armored Division, which deployed to Iraq. After completing 14 months in Iraq, he redeployed the division to Germany to complete his command tour. GEN Dempsey has also served in Riyadh, Saudi Arabia, as the program manager, Saudi Arabian National Guard Modernization Program. Upon graduation from the U.S. Military Academy, he was commissioned as an armor officer. He first served in the 2nd Armored Cavalry Regiment as a scout, support platoon leader and squadron adjutant. Since then, GEN Dempsey has commanded at all levels and in multiple leadership positions, including executive officer at both the battalion and brigade levels. He deployed with the 3rd Armored Division in support of Operations Desert Shield/Storm. GEN Dempsey has also served as the assistant deputy director for Politico-Military Affairs (Europe and Africa), J-5, and as special assistant to the chairman of the Joint Chiefs of Staff, The Joint Staff, Washington, D.C. He holds master's degrees from Duke University, the Command and General Staff College, and the National War College.*

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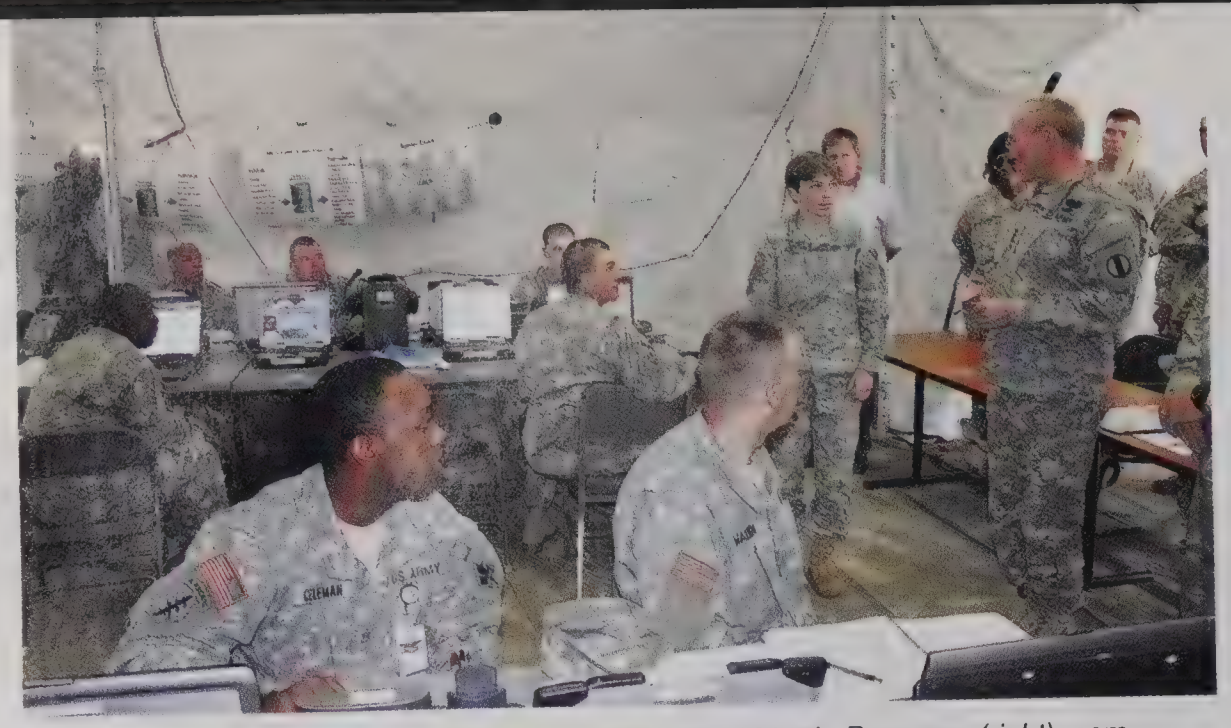
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During his visit to Fort Gordon, Ga., in May, GEN Martin Dempsey (right), commanding general U.S. Army Training and Doctrine Command, addresses Signal soldiers operating in Training Area 10, the model command post of the future.

leaders who can anticipate, create opportunities and manage transitions. The strategy addresses the shifting balance of tactical and operational art as our adversaries decentralize, network and operate among the people to overcome our technological advantages. This demands that we develop leaders who can lead increasingly decentralized organizations; network with their joint, interagency, intergovernmental and multinational (JIIM) partners; and effectively employ combat power while winning the support of populations to ultimately defeat our adversaries.

In response to this shifting balance between tactics and operational art, the strategy requires leaders to become proficient in "design" as a preliminary step to the military decision-making process in order to understand and properly frame the ill-structured and complex problems they will encounter in the future operating environment. Many aspects of leader development are timeless, and these will not change. The strategy builds upon these characteristics to better prepare our leaders for the future. The Army leader development strategy requires a balanced commitment between the three pillars of leader development—training, education and experience—and regards the development of leaders as a career-long process.

The strategy also builds on our Army's years of combat experience in Afghanistan and Iraq, but it recognizes the need to broaden leaders beyond their demonstrated competency in irregular operations to achieve proficiency in full spectrum operations. There are "gaps" in our current leader development strategy, and we will close them. Even our most junior leaders have access to capabilities while deployed that are not replicated today at continental U.S. training bases. We must ensure that the "scrimmage is harder than the game" if we are to develop leaders prepared for full spectrum operations against hybrid threats. Accordingly, the strategy challenges us to enrich leader training and education by using technology and adapting training methodologies to replicate complexity and hybrid threats in the classroom and at home station.

Concurrently, and as part of the TRADOC operational concepts update, we will develop and then begin implementation of the Army training concept for 2015. This important concept will describe how we will build capacity in the institution and adapt collective training in our Army as units reach and eventually exceed a one-to-two boots-on-the-ground (BOG)-to-dwell ratio. Above all, it will provide a holistic approach for executing the right training at the right time in the right place for individual soldiers and civilians, leaders and units.

The Army training concept will encompass the domains of institutional training, home-station training, combat training centers and training while deployed. The operational environment will be the thread that integrates training across each of these domains. The goal is to capture effectively the complexity of the future operational environment and the resulting adaptations required in the way we provide training. The objective of the Army training concept will be to drive us toward replicating complexity to provide a richer training experience focused on the hybrid, networked and decentralized threats we will most likely face in the future. It is also intended to empower commanders by properly preparing them for the task of training for full spectrum operations.

Full spectrum training conducted within the guidelines of the Army training concept will be based on doctrine delivered to our soldiers and leaders in ways that are very different from those of the past. TRADOC has already initi-



Soldiers attending the 7th Army's NCO Academy learn leadership skills during simulated missions at the Joint Multinational Training Command in Grafenwoehr, Germany.

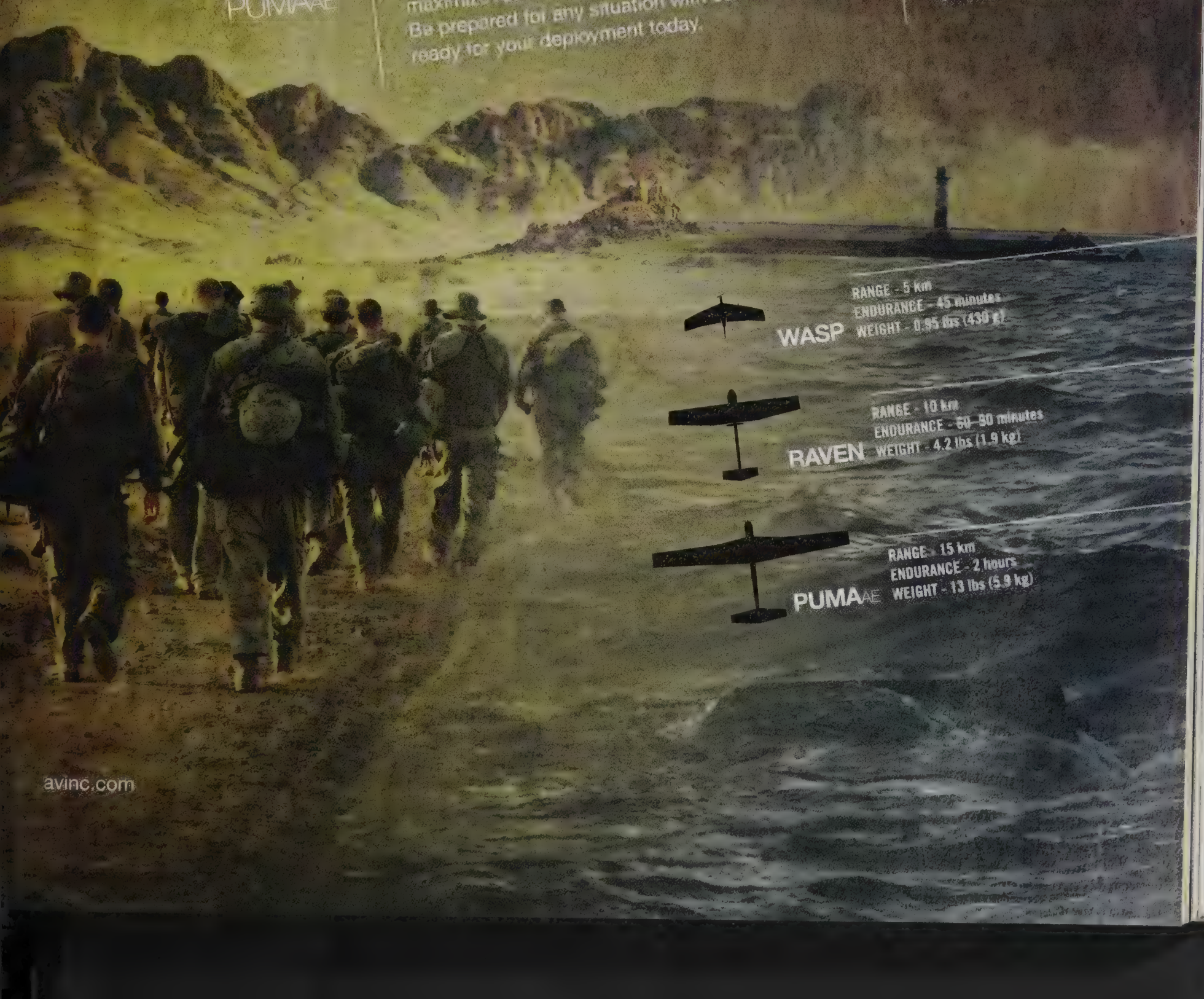
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ENDURANCE - 2 hours
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ated action to significantly reduce the number of manuals described as "doctrine," improve their quality and establish a separate, larger category called Army tactics, techniques and procedures (ATTP). Through Army Knowledge Online (AKO), we will utilize social-networking software to allow our population of professionals to update and maintain current, credible and relevant ATTP for the Army. Our way ahead designates 94 field manuals (doctrine) and 215 ATTP volumes. Using a "wiki" approach of open collaboration and self-governance, the Combined Arms Center (CAC) established a pilot web site in July and posted seven current FMs targeted for conversion to ATTP. This AKO site will allow current, experienced military professionals to collaboratively edit and maintain these ATTP manuals online with CAC oversight.



SGT Timothy Russell, 10th Transportation Company, 260th Quartermaster Battalion, 3rd Sustainment Brigade, instructs SPC John Williams and SPC Gavin Ivy, 24th Ordnance Company, 87th Combat Sustainment Support Battalion, on how to perform preventive maintenance checks and services on their vehicle during a driver training class at Hunter Army Airfield, Ga.

The Chief of Staff of the Army recently tasked TRADOC with the mission to revise the Army's brigade combat team (BCT) modernization plan, which complements the leader-development strategy, the capabilities integration strategy and the training concept. While the capabilities integration strategy outlines the resource-informed balance of capabilities the Army requires to remain versatile enough to confront future uncertainties, the BCT modernization plan addresses the incremental delivery of capabilities to our most versatile formations. The plan also addresses delivery of critical technologies fully synchronized with ARFORGEN while building a mix of networked BCTs that can better take advantage of mobility, protection, information and precision fires.

The Army BCT modernization plan, an essential investment in future readiness, defines and integrates a broad range of capabilities and initiatives to facilitate innovative training and to expand available options in developing versatile, campaign-capable, expeditionary units.

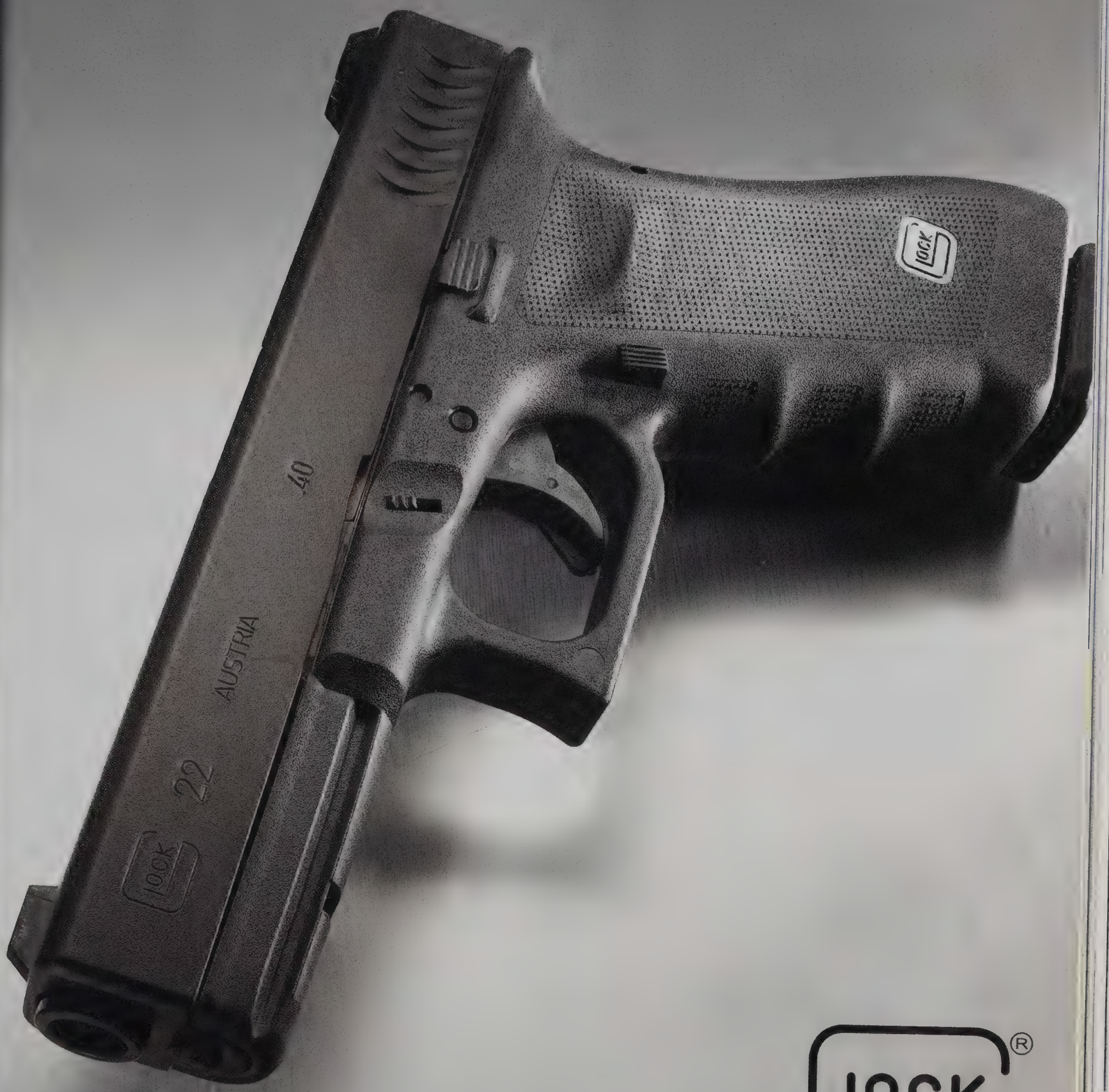
As the Army's proponent for concepts and capabilities integration, TRADOC will continue to assess how best to provide a balanced and versatile force for the future security environment. The mix of BCTs and associated enablers available in each pool of the ARFORGEN cycle represents our expression of balance; our design of these modular formations is our expression of versatility. Decisions regarding force mix and force design are sequential and cascading and will inform our modernization strategy. These three complementary efforts will provide our Army with the balance of capabilities needed to win the current fight while ensuring that the Army maintains the agility and versatility to confront and defeat adversaries in the future operating environment.

The efforts on force mix, force design and modernization, in addition to the Army leader-development strategy and Army training concept, are all being built upon the foundation of the Army capstone concept. This document will provide the Army's overarching vision of future conflict and a blueprint for future operations on land as part of a JIIM team. The capstone concept will articulate why our institution must continually adapt and how the Army will prepare to meet the challenges and opportunities ahead. It will provide the framework for doctrine, organization, training, materiel, leadership and education, personnel and facilities to evolve for the Army within a broader context of "operating under conditions of uncertainty and complexity in an era of persistent conflict." The capstone document also establishes a central foundation for subordinate warfighting functional strategies, experimentation and capabilities integration.

By the end of fiscal year 2011, TRADOC will be postured to support the demands of an Army at a one-to-two BOG:dwell ratio. Our adaptation efforts will have significantly synchronized the efforts of the operational and institutional Army. We will have successfully implemented a variety of strategies and concepts that will enable the Army to fully develop its leaders, train the force and more effectively modernize by integrating emerging capabilities.

It is said that war is the final auditor of military institutions. With eight years of war behind us and the expectation of persistent conflict ahead, the Army has already undergone numerous adaptations to better prepare its soldiers and leaders for the current fight. In order to confront the challenges that lie ahead, we must continue to adapt as an institution and create capabilities that maximize our flexibility for the future. TRADOC is committed to building greater balance and versatility into our campaign-quality expeditionary Army to win the war, preserve the all-volunteer Army and develop leaders for an uncertain future. TRADOC is in the fight. Victory starts here! ★

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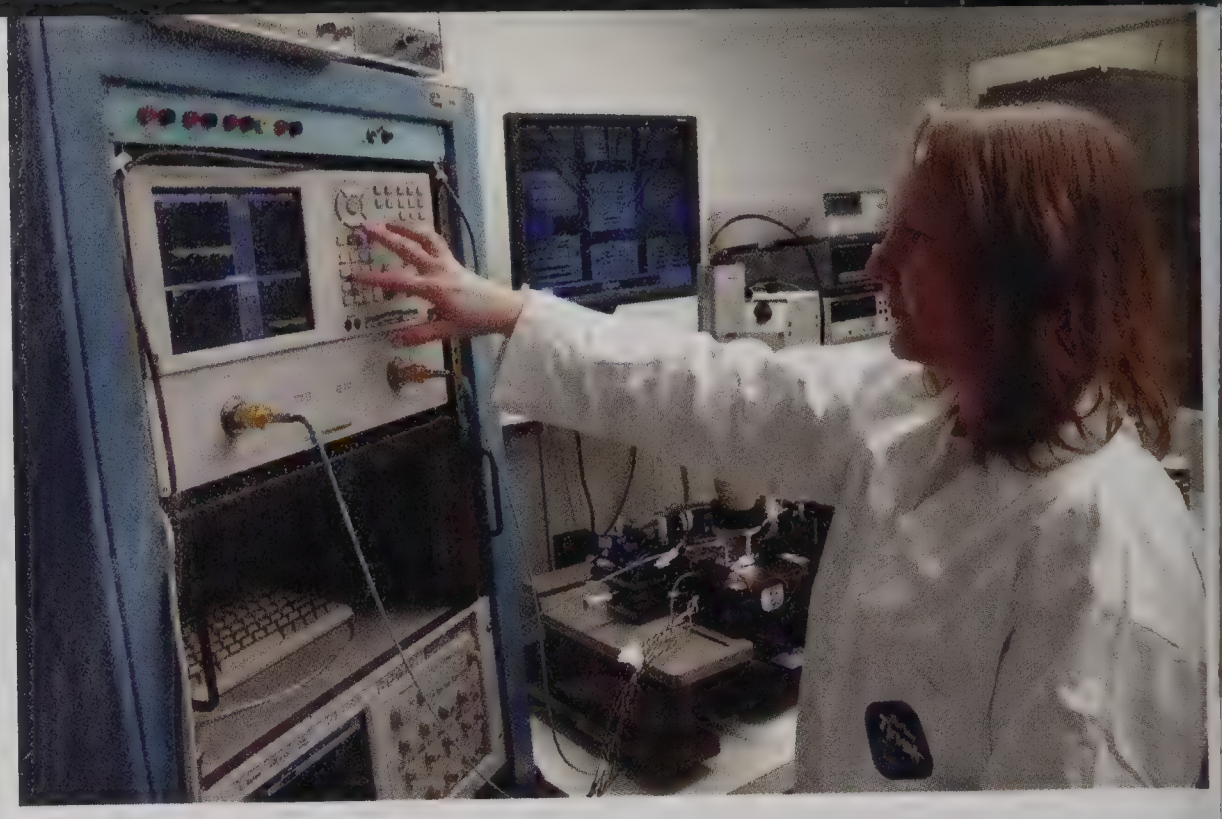
By GEN Ann E. Dunwoody
Commanding General,
U.S. Army Materiel Command
and
CSM Jeffrey J. Mellinger
U.S. Army Materiel Command

As we celebrate the Year of the Noncommissioned Officer (NCO) in 2009, I have asked my command sergeant major, CSM Jeffrey Mellinger, to join me in writing this article. CSM Mellinger served nearly 34 months as the command sergeant major for Multi-National Force-Iraq. He knows soldiers and their needs in the combat theater and is respected throughout our Army as epitomizing the best of the NCO Corps.
—GEN Ann E. Dunwoody

These are demanding times for our nation and our Army. We have more than 240,000 soldiers deployed in nearly 80 countries engaged in full spectrum operations—from counterinsurgency missions in Iraq and Afghanistan to providing a stabilizing force for allies. Our Army is the best equipped, best trained, best manned and best led force in the world.

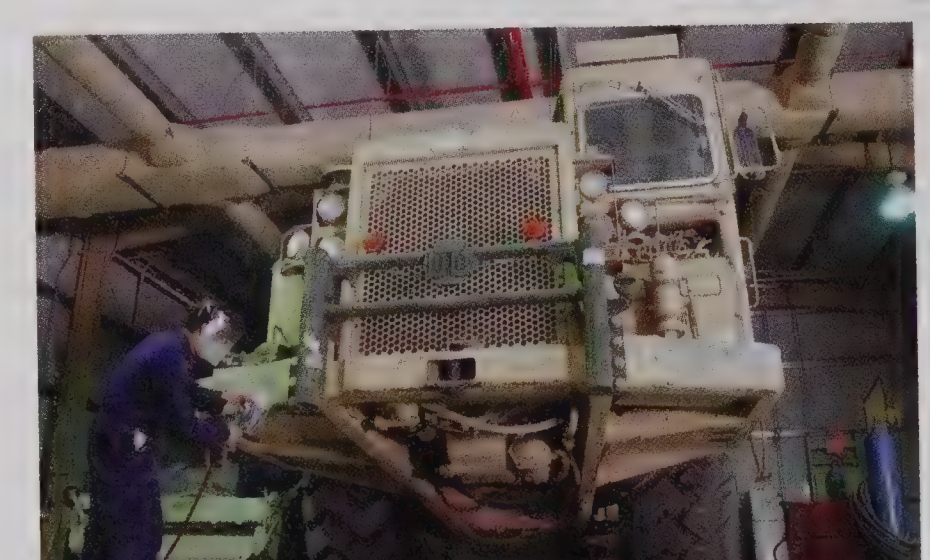


With more than 60,000 soldiers and civilians and a presence in 48 states, Army Materiel Command (AMC) is there every step of the way to provide indispensible logistical



Janice Rock, an electronics engineer in the Radio Frequency Technology Division, Applied Sensors, Guidance and Electronics Directorate, adjusts some of the millimeter wave-testing and evaluation equipment in her laboratory.

Nayas Thulung, an employee with ITT Corp., sands the front bumper of a Caterpillar 621B scraper at the 1st Battalion, 401st Army Field Support Brigade auto body repair facility at Camp As Sayliyah, Qatar. The facility opened in April.



support. During more than seven years of war, AMC has aggressively responded to the increasingly complex global requirements of our Army. If a soldier needs it, AMC is ready to provide it. Seamless and timely support to warfighters is our highest priority.

Given the prevailing asymmetric battlefields and our borderless enemy, the needs of soldiers and our Army will continue to rapidly evolve and grow. Running parallel to our fighting forces' shifting requirements is the goal of restoring the Army's balance as we set the stage for our nation's future security.

AMC's Proud Workforce: Our Greatest Resource

Regaining a balanced Army while preparing for a wide range of emerging threats will depend on a clear vision. AMC, through the materiel enterprise, is taking an exciting path that encourages new modes of thinking, robust collaboration, better communications and enhanced cooperation at all levels. This places a premium on retaining and attracting superior talent and expanding skill sets: the AMC engineers, scientists, executives, information technology architects, planners, machinists and managers we will need to redefine acquisition and logistics.

Clearly, AMC's advantage is human capital. Our most valued asset is our dedicated workforce. That's why we are investing in training and educating our current workforce to meet the challenges of the future. It's also the reason we are aggressively pursuing initiatives such as the AMC Fellows and other intern programs to recruit and retain the talent that future Army requirements will demand. Our evolving skill sets will help us create an enterprise mind-set in order to tackle the challenges associated with the total cost of life-cycle management.



***GEN Ann E. Dunwoody** is the commanding general of Army Materiel Command. Previously, she served as Deputy Chief of Staff, G-4, and commanding general, U.S. Army Combined Arms Support Command and Fort Lee, Va. She began her Army career as the supply platoon leader for the 266th Maintenance Company (Forward, Direct Support), 100th Supply and Services Battalion (Direct Support). Other past assignments include division parachute officer for, and later commander of, the 407th Supply and Transportation Battalion, 82nd Airborne Command, in Operations Desert Shield and Desert Storm in Saudi Arabia, and commanding general of Division Support Command, 10th Mountain Division (Light Infantry), and the XVIII Airborne Corps' 1st Corps Support Command. GEN Dunwoody has a master's degree in logistics management from Florida Institute of Technology.*



***CSM Jeffrey J. Mellinger** is U.S. Army Materiel Command's command sergeant major. He was previously assigned to U.S. Army Alaska. Drafted in 1972, CSM Mellinger has held numerous command sergeant major positions—with the 3rd Battalion, 10th Infantry, Fort Leonard Wood, Mo.; U.S. Army Japan and 9th Theater Support Command, Camp Zama, Japan; First U.S. Army, Fort Gillem, Ga.; and Multi-National Force–Iraq. His military education includes the NCO Basic Course (Commandant's List), Ranger School, Jumpmaster School, Jungle Expert School, FBI Crisis Reaction Course, Military Freefall Course, Drill Sergeant's Course (Commandant's List and Honor Graduate) and the NCO Advanced Course, among others. He has more than 3,000 hours of accumulated freefall in more than 3,700 jumps and is a FAA Master Parachute Rigger.*



The AN/TPQ-48 lightweight counter-mortar radar (LCMR) can rapidly detect, track and locate mortar rounds out to the effective range of most mortar weapons, which allows combat air support or counterfire to neutralize the enemy.

Sustainment: Growing Urgency

AMC is currently engaged in a multipronged support effort in theater. The scope, scale and complexity of the Iraq awdown—conducted on a compressed timeline—pose gnificant challenges. As we retrograde equipment, we conue to sustain forces in Iraq while intensifying our efforts in ghanistan. Every facet of AMC's industrial expertise and oduction might is being tested. We are rapidly and aggresely engaged in reset and repair of soldier equipment, an egral part of the Army force generation model. In fiscal ar (FY) 2009, we are projected to reset 180,000 pieces of uipment, including more than 400 aircraft, 2,700 tracked hicles and 150,000 weapons. Last year, AMC reset 33 gade equivalent sets of equipment, and we are projected do the same in FY 2009.

There is also a critical human dimension to how we exete reset. Modern weapons and new technology mean thing if we cannot support our soldiers and their fami—those who have made us the very best army in the rld. As our Army looks for ways to extend the dwell time our soldiers, AMC is doing its part to preserve the quality dwell time. We are working to ship unit equipment ditly from the operational area to the depots, sending repair teams to installations and securing and maintaining left-behind equipment for the unit—all in an effort to provide our men and women in uniform with the time to rest, recuperate, attend schooling and develop their individual skills.

We are able to accomplish these critical sustainment missions through our arsenals, depots, ammunition plants, forward repair activities and now our directorates of maintenance in theater, along with our commercial industry partners.

LCMCs: Leading the Drive to Modernize

AMC's sheer sustainment numbers, though impressive, are only part of the story. Our life-cycle management commands (LCMCs) are mounting an unprecedented modernization campaign that starts and ends with the expanding needs of the warfighter.

This evolutionary initiative is organized around four categories: increased capability, lethality, survivability and lightening the load. That last category has gained greater importance to forces deployed across Afghanistan's unforgiving terrain. The concerted modernization campaign of our LCMCs has led to a cascade of big innovations and incremental improvements, stunning advances along with a flow of continuous refinements to existing weapons platforms, including:

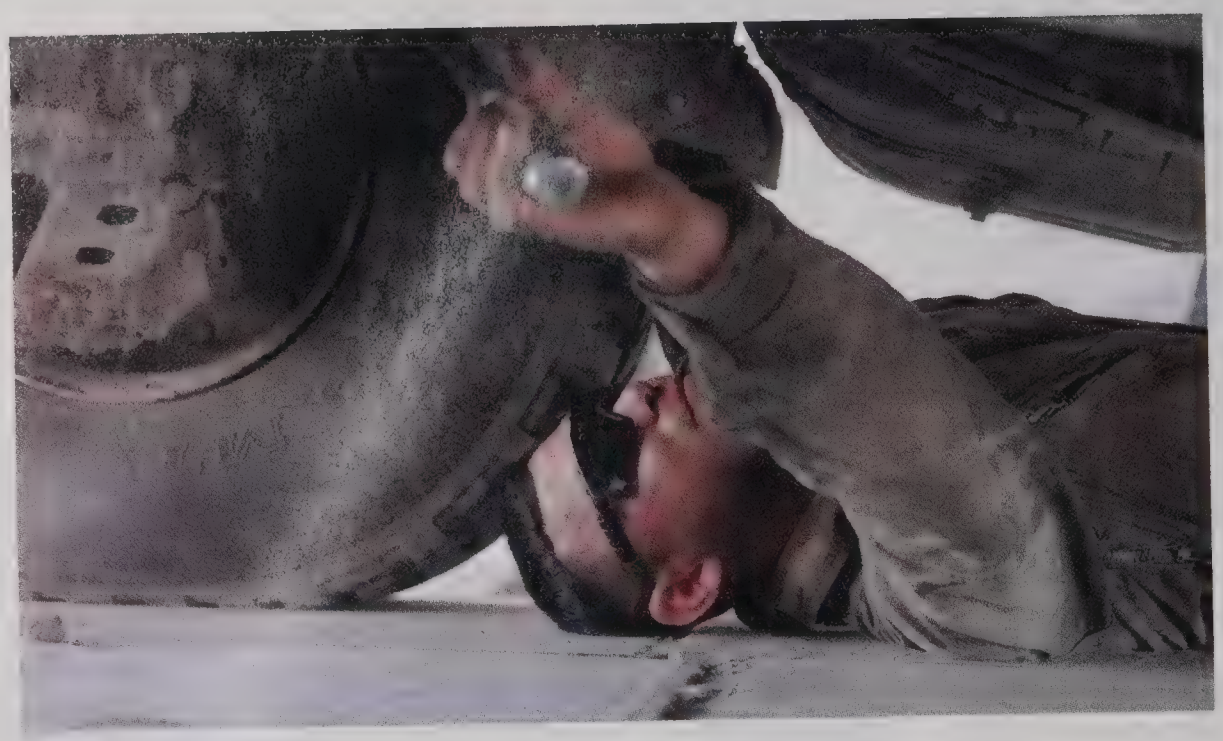
■ The Joint Munitions and Lethality LCMC has developed Excalibur, a precision-guided, all-weather 155 mm artillery round that offers a more than 100-kilometer range, increased lethality over older model projectiles, fly-to-grid capability so no laser is required and enhanced capability to minimize collateral damage.

■ The Research, Development and Engineering Command (RDECOM) spearheaded the development of the M939 5-ton truck crew protection system. The crew protection kit provides ballistic protection, antipersonnel and small antivehicular mine protection, a gun ring upgrade, an air conditioner and a movable side transparent armor, giving the crew unparalleled protection along with amplified lethality.

■ A lightweight counter-mortar radar developed by the Communications-Electronics LCMC (Army Team



A mechanic from the Material Maintenance Division at the Fort Bragg, N.C., logistics directorate runs a computer check to determine what parts he needs to repair a Humvee. Most repair parts for each type of vehicle are put into kits to save time.



SPC Ramijio Gonzales, 2nd Battalion, 12th Cavalry Regiment, 4th Brigade Combat Team, 1st Cavalry Division, conducts a preventive maintenance check and service on a tactical vehicle before a combat patrol at Contingency Operating Base Adder, Iraq.

Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) provides continuous, 360-degree surveillance to detect, locate and report friendly and enemy indirect mortar, artillery and rocket fire systems. Its modular design allows it to be carried by two people, and it can fit in the cargo area of a Humvee, allowing rapid transportation and setup.

Every LCMC—supported by RDECOM, U.S. Army Security Assistance Command, depots, arsenals, integrated logistics support centers and Army Contracting Command—continues to accelerate the delivery of breakthrough technological advances to the warfighter. More than ever, however, there is the need for forthright, performance-oriented reporting from the field.

NCOs' Pivotal Role: Feedback Loop

The impressive yield of modernization initiatives coming from the LCMCs would not be possible without the participation of noncommissioned officers in the field. NCOs push, probe and drive ongoing discovery learning. They gather essential, front-line information and constantly offer the soldier's perspective on innovations and new equipment, and they even help quicken the pace of materiel deployment.

NCOs are the vital link powering an essential feedback loop that results in products and features tailored to soldiers on the battlefield. Every example of modernization, from the objective gunner protection kit to the unit water pod system, is the result of close collaboration and feedback from a noncommissioned officer.

A recent example illustrates our NCOs' central role. Recognizing the need for a platform to safely repair large vehicles, NCO feedback from RDECOM's Field Assistance in Science and Technology Team led to the development of the mechanic's platform—a portable, lightweight structure that can easily be mounted on the tire of large, wheeled vehicles such as the mine resistant ambush protected vehicle. Instead of balancing on the tire or wheel to perform maintenance, soldiers can now use the mechanic's platform to safely perform quick, efficient maintenance. NCOs identified the problem, collaborated across the materiel life cycle and then helped drive the rapid deployment of a solution. The monumental challenges ahead make the role of NCOs even more critical.

Responsible Drawdown and Reset: Our Historic Mission

The massive operational mission we are about to undertake is breathtaking: The amount of equipment in Southwest Asia to be redistributed, transferred, donated or disposed as a result of responsible drawdown will test every facet of our logistical capabilities.

While the tasks before us are formidable, the way ahead is clear. We are tracking, moving and supporting more than 8 U.S. brigade combat team equivalents; more than 139,000 U.S. military, Coalition and civilian personnel; 142,000 containers; and millions of individual items on more than 35



Mechanic Ricky Ellison prepares to reassemble a truck engine vent line in a maintenance shop run by the directorate of logistics, Fort Campbell, Ky. More than 250 skilled technicians are needed to reset ground forces equipment after deployment and maintain materiel that is left behind.



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Above, artillery repairers at Anniston Army Depot, Ala., guide a hoisted turret to its hull during the assembly of an M1 Abrams tank. Below, at the Missile Recycling Center on Anniston Army Depot, Amtec Corporation employee Donnie Chastain (left) and Anniston Defense Munitions Center explosive operator Torrence Sims prepare a TOW missile for removal from the launch tube.



bases in theater. Our success in this epic drawdown effort hinges on the entire Army and Department of Defense enterprises working together in close coordination. To this end, the materiel enterprise provides an operational drawdown/reset platform that is already fully engaged with senior leaders in Kuwait, Iraq and Afghanistan as well as our partners at Headquarters, Department of the Army and DoD.

Now the range of AMC's capabilities pays off—our dedicated workforce, our urgency regarding sustainment, the ongoing drive for modernization across our LCMCs and, of course, the pivotal role played by our NCOs. To use these advantages and engage the full spectrum of materiel enterprise capabilities, we have established the Responsible Reset Task Force. This task force functions as the executing agent for AMC to enable responsible drawdown and responsible reset in support of resetting the Army.

Underlying all of our efforts is the understanding that drawdown and reset must be simultaneous as well as complementary. That's why we are currently planning and executing responsible drawdown and responsible reset together to achieve truly integrated operations. The great work of logisticians across the entire spectrum of operations, from foxhole to factory, will make these operations seamless and synchronized.

The entire drawdown and reset process rests on a forward focus—to gain and maintain accountability early in the process and maximize the velocity of movement of equipment from forward-deployed locations through a reset facility and back to fill the dynamic needs of our Army (unit requirements, Army prepositioned stock, foreign military sales cases, training sets and so on). To address the need for a center of gravity, we will establish a forward capability in Kuwait.

As we establish a forward footprint in support of responsible drawdown and reset, we will have to demand enhanced visibility and accountability. A common operating picture will allow all stakeholders to see equipment from the time it is identified in theater to be retrograded all the way through to the time it is reissued. Historically, real-time logistical automation tools have always been a weak link. We must get it right this time. This total asset visibility is a critical element in amplifying and accelerating all operations of responsible drawdown and reset. Sharing real-time information—allowing all stakeholders to access comprehensive data—will prevent bottlenecks, increase responsiveness and point the way to accomplishing our historic mission.

A Rapidly Evolving AMC: In Support of a Changing Army

As we accelerate toward our future, AMC will do its part to help rebalance our Army. We will synchronize the resetting of equipment and the delivery of equipment in order to best protect dwell time.

We will continue to invest in human capital as we right-size our organic industrial base. We will amplify our Army's battlefield advantage by accelerating the development of new technologies across our LCMCs. We are also working to ensure that we are good stewards of taxpayer dollars while meeting the needs of combatant commanders.

Army Materiel Command is moving out on all fronts to do what we do best—anticipating, meeting and exceeding our warfighters' rapidly evolving needs. One thing is certain: We can't afford *not* to do this.

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U.S. Forces Korea: Preserving Peace and Stability

By GEN Walter (Skip) Sharp
Commander, U.N. Command,
Combined Forces Command
and
U.S. Forces Korea

Since the ratification of the mutual defense treaty in 1954 by the Republic of Korea (ROK) and the United States, the ROK-U.S. alliance has deterred aggression, maintained peace on the Korean Peninsula, and promoted security and stability in Northeast Asia. This bilateral alliance, the strongest in the world, has served both nations well. The ROK has transformed from a country devastated by war into a vibrant democracy with one of the world's largest economies and a valuable ally and strategic partner of the United States. Korean and American forces have stood side by side in the defense of freedom on the Korean Peninsula, in Vietnam, and, more recently, in Iraq, Afghanistan and off the coast of Somalia.



The U.S. presence in Northeast Asia is a long-term investment in regional stability with the objectives of preserving



New housing at U.S. Army Garrison (USAG) Humphreys, South Korea, will be among the best in the Army.

peace, stability, democracy and free-market economies; engaging with other regional powers; and setting the conditions for the eventual peaceful reunification of the Korean Peninsula. The ROK-U.S. alliance will continue to be the centerpiece of American presence in the region for the foreseeable future.

I have established three priorities for U.N. Command/Combined Forces Command/U.S. Forces Korea. First, to fight and win against any threat to the Republic of Korea; second, to strengthen the ROK-U.S. alliance; and third, to improve the quality of life of those servicemembers, DoD civilians and family members serving in the Republic of Korea.

Fight and Win

My first priority is to maintain a trained, ready and disciplined combined and joint command that is prepared to fight and win. Our commitment to the alliance spans the entire spectrum of conflict, so it is imperative that our forces maintain the highest possible level of training and readiness.



GEN Walter (Skip) Sharp *is the commander, U.N. Command, Combined Forces Command and U.S. Forces Korea. A graduate of the U.S. Military Academy, he was commissioned an Armor officer. His command positions include armor company commander, 1st Battalion, 67th Armor, 2nd Armored Division, Fort Hood, Texas; squadron commander, 1st Squadron, 7th U.S. Cavalry, 1st Cavalry Division, Fort Hood; regimental commander, 2nd Armored Cavalry Regiment, Fort Polk, La.; assistant division commander for maneuver, 2nd Infantry Division, Camp Red Cloud, South Korea; and division commander, 3rd Infantry Division, Fort Stewart, Ga. He commanded troops in Operations Desert Shield and Desert Storm, Operation Uphold Democracy in Haiti and SFOR's Multinational Division (North) in Bosnia. GEN Sharp has served in the Directorate of Combat Developments at Fort Knox, Ky., the Armor/Anti-Armor Special Task Force and the Armored System Modernization Office at the Pentagon. He has held four assignments at the Pentagon on the Joint Staff, including deputy director, J-5, for Western Hemisphere/Global Transnational Issues; vice director, J-8, for Force Structure, Resources and Assessment; director for Strategic Plans and Policy, J-5; and director of the Joint Staff. He earned a master's degree in operations research and system analysis from Rensselaer Polytechnic Institute and is a graduate of the Armor Basic Course, the Field Artillery Advanced Course, the Command and General Staff College, and the Army War College.*

For soldiers, a tour in Korea will continue to offer rewarding career opportunities by enhancing professional development across the full spectrum of combat operations. This is especially true for our noncommissioned officers (NCOs), who serve in critical leadership positions throughout the ROK-U.S. alliance and are, in fact, the backbone of this alliance.

Soldiers in Korea are able to train to standard their core warfighting mission-essential tasks. Training ranges in Korea allow units to conduct gunnery training all the way through Table XII. We continue to develop our training facilities and opportunities to conduct full spectrum training for all Army units in Korea. Training with their ROK army counterparts provides soldiers in Korea the opportunity to work with a strong, modern, foreign military. This enhances the ability of U.S. soldiers to operate in a combined and coalition environment anywhere in the world.

Eighth U.S. Army—in conjunction with the Department of the Army—is aggressively improving live, virtual, constructive and gaming technologies that train brigade and battalion



U.S. and Korean troops conduct combined training to be ready to "fight tonight."





Left, U.S. family members in Korea are permitted to visit the DMZ. They also have opportunities to broaden their circle of friends (right). Korea offers experiences that families remember for the rest of their lives.

attle commands in a major combat and full spectrum operaonal environment. Our exercise program continues to hone he "fight tonight" readiness of Army forces in Korea. Our ajor annual exercises, Key Resolve/Foal Eagle and Ulchi reedom Guardian, ensure that ROK and U.S. forces can ork together to defend the alliance against any threat.

Whether serving at the Joint Security Area or with Eighth rmy, Second Infantry Division, Installation Management ommand-Korea, 65th Medical Brigade, 19th Expedionary Sustainment Command or any other unit in Korea, oldiers will be rewarded with an experience that they will nsider one of the best assignments of their careers.

Strengthen the Alliance

My second command priority is to strengthen the ROK-.S. alliance. In addition to improving combined military pabilities, our most significant initiative in Korea is the ansition to an ROK-led national defense, which will culminate with the transition of wartime operational control of Korean forces to the Republic of Korea on April 17, 2012.

Both ROK and U.S. forces will stand up new headquarters. The ROK Joint Chiefs of Staff (JCS) will be the supported command, and U.S. Korea Command (KORCOM) will be the supporting command. Although the KORCOM commander will assume a doctrinally supporting military relationship, he will still maintain national command over all U.S. forces. KORCOM will be a fully capable and resourced U.S. joint warfighting command, and the American force level in Korea will remain at the current 28,500 personnel.

U.S. Army forces in Korea will execute the full spectrum of combat operations in support of the defense of the ROK-U.S. alliance, implement armistice and transition-to-war missions and tasks, liaise with the ROK army, conduct force protection and noncombatant evacuation operations, participate in and support theater and JCS-level exercises, and conduct alliance-building operations.

Improve Quality of Life

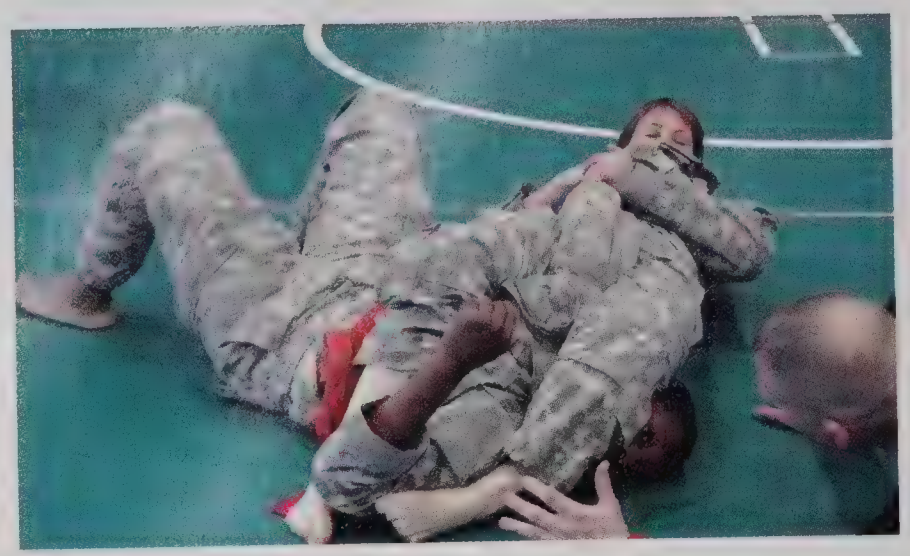
My third priority is to improve the quality of life for servicemembers, DoD civilians and their families. This is essential in making the ROK the assignment of choice for all servicemembers. Korea is becoming a normal tour just like Germany and Japan. Servicemembers have the opportunity to serve 24- or 36-month tours; those with families will serve normal three-year accompanied tours. Tour normalization supports all of my command priorities: It improves our "fight tonight" readiness by keeping trained forces in place for a longer period of time, improving continuity and stability; it demonstrates a strong, visible and enduring U.S. commitment to the security of the Republic of Korea; and finally, it eliminates long and unnecessary separation of servicemembers from their families.

Presently, there is limited family housing on Army garrisons in Korea. There are high-quality new apartments available off-post, however. Korean housing is modern and



A U.S. soldier and his son enjoy the water slide on a hot summer day at Splish and Splash, the water park at USAG Humphreys.

Below, soldiers serving in Korea train and compete in Army Combatives, the techniques and tactics useful in hand-to-hand combat. Right, 2nd Infantry Division's martial arts demonstration team members, who represent the fighting spirit of soldiers serving in Korea, hone their warrior skills.





built to U.S. standards or better. The overseas housing allowance covers the cost of living off-post. Single-soldier housing is improving, and many of our soldiers are living to the 1+1 standard. All single-soldier housing built at U.S. Army Garrison (USAG) Humphreys, our future main garrison in Korea, will be 1+1.

Over the next few years, the majority of Army forces in Korea will relocate to new facilities at USAG Humphreys near Pyeongtaek, approximately 40 miles south of Seoul. This change moves soldiers to where they will assume a less intrusive footprint, returns valuable land to the Korean people, improves command and control across consolidated forces, and improves training opportunities. Relocation of Army forces to USAG Humphreys will also significantly improve the quality of life for our soldiers and their families. USAG Humphreys will be a modern installation with world-class facilities; the headquarters, offices, motor pools, family housing, single-soldier housing, schools, dining facilities, PX, commissary and play areas will be among the best in the Army.



Above, 2nd Infantry Division conducts full spectrum training to maintain its readiness to defend the Republic of Korea. Below, U.S. soldiers serving on the peninsula train frequently to ensure combat readiness.



We are working very hard to ensure that we have the best services supporting our families at all Army installations. From our excellent DoD Education Activity schools to Army community services to high-quality, readily available medical services, families in Korea can take comfort in knowing that they will have the finest quality of life possible here.

The ROK-U.S. alliance will continue to play a significant role in preserving peace and stability in Northeast Asia for the foreseeable future, and the Army will remain a crucial component in strengthening this alliance. By implementing these three command priorities, we are not only securing the defense of the Republic of Korea but also strengthening this great alliance while improving the quality of life for soldiers and their families across the board.

For soldiers, an assignment in Korea is a rewarding experience that advances their professional development. For our outstanding Army NCOs, service in Korea will continue to offer leadership opportunities and the ability to work with a valuable ally in support of an important mission. With the implementation of tour normalization and the ongoing move into new world-class facilities at USAG Humphreys, families can be together and live in some of the best housing in the Army. Add to this the advantage of living in one of the world's most modern countries, with a rich culture and welcoming people, and it will not be long before the secret is out. This is the new Korea, the assignment of choice. For more information, visit www.usfk.mil. ★



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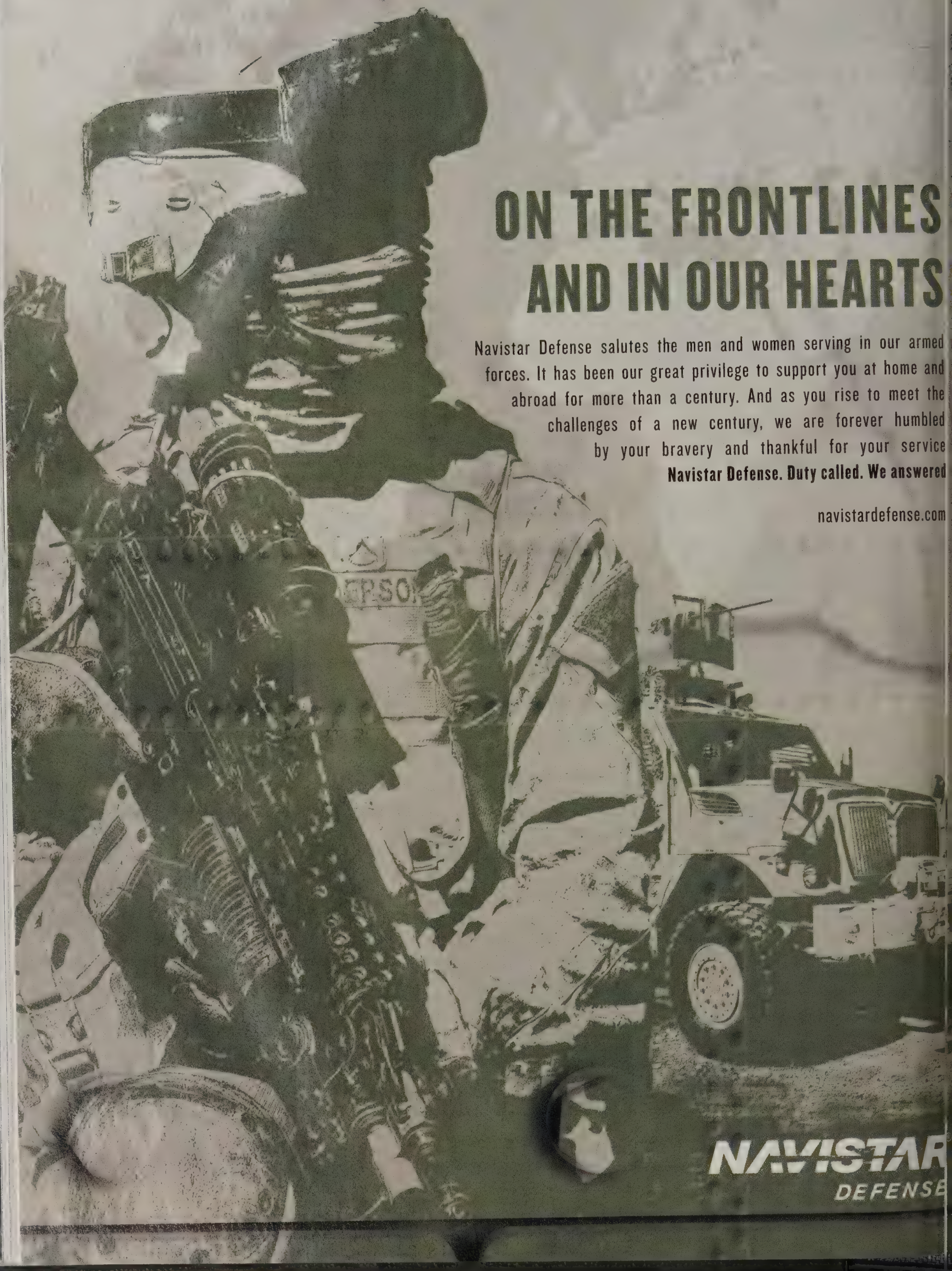
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Historic Milestones Towards a Sovereign, Stable And Self-Reliant Iraq

By GEN Raymond T. Odierno
Commander,
Multi-National Force-Iraq

Marked by significant progress made possible by the courage, competence and commitment of the men and women of Multi-National Force-Iraq (MNF-I), 2009 has been a historic year of transitions for Iraq, the Iraqi people and MNF-I. Security incidents are the lowest since Operation Iraqi Freedom began, providing the foundation for continued development across political, diplomatic, economic and rule-of-law domains.



Together with the government of Iraq (GoI), we are moving towards a shared goal of a sovereign, stable and self-reliant Iraq. By capitalizing on the security gains made possible by the surge of forces in 2007 and 2008, we continue to



SFC Brian Brewer, assigned to 12th Brigade, 2nd Training Army, 2nd Division Military Transition Team, checks a target to help an Iraqi soldier zero his weapon during an M16 qualification course at Al Kindi Base in Mosul, Iraq.

move forward by transitioning security responsibilities to increasingly capable Iraqi security forces (ISF). Progress has continued at a heartening pace, with the ISF now responsible for security in Iraq's cities. Partnered with the U.S. Embassy-Baghdad (USEMB-B), international organizations and the government of Iraq, MNF-I continues to support a whole-of-government approach—improving security, training an effective ISF, supporting civil capacity and building rule of law—to assist Iraq's development as a long-term strategic partner that will contribute to regional peace and security. The challenges ahead of us are real, but the opportunities are great as MNF-I helps set the conditions for the future.

In January 2009, the United States and the government of Iraq implemented two historic agreements: the security agreement governing the role of U.S. forces through 2011 and the strategic framework agreement establishing the foundation for a comprehensive, long-term partnership between our two countries. Together, these agreements are evidence of the United States' continued commitment to Iraq, its people and regional stability. Reflecting a maturing relationship between two sovereign nations and a greater degree of cooperation between two partners, since May 2009 MNF-I has conducted completely transparent conventional and special operations—by, with and through the ISF. Our partnering, mentoring and training efforts have helped the ISF develop its capacity and professionalism. Increasingly, the ISF is conducting independent operations enabled by U.S. forces, including intelligence, surveillance and reconnaissance, air power, logistics and engineering.

In accordance with the security agreement, on June 30, 2009, the ISF assumed primary responsibility for providing security in Iraqi cities as U.S. combat forces relocated outside of the cities, a process we began in the fall of 2008. To facilitate training, advising and enabling of ISF operations in the cities, a small number of U.S. forces remain colocated at joint coordination centers. Outside the cities, our troops continue to conduct full spectrum operations by, with and through the ISF. Our combined, synchronized efforts have established a layered defense: As Iraqis secure the cities, our combat forces secure the belts around cities and the borders, reducing extremist and terrorist freedom of movement, eliminating safe havens and preventing the facilitation of foreign fighters. Simultaneously and inseparably, the soldiers, sailors, airmen, marines and coast guardsmen of MNF-I continue to assist in building civil capacity, enabling an increasingly just and representative GoI to provide for the needs of its people.

The troops of MNF-I continue to demonstrate the adaptability, versatility and initiative required to succeed in this complex environment characterized by continuing transitions and change. Our agile leaders understand the operating environment—security, political, economic, tribal and cultural—and continually assess the potential impacts on mission accomplishment. Applying counterinsurgency principles, our brigade combat teams (BCTs) have focused on protecting the population by neutralizing al Qaeda in Iraq (AQI) and other Sunni and Shia extremist groups through a combination of offensive, defensive and stability operations with a whole-of-government approach. MNF-I also continues to support GoI reconciliation efforts with the Sons of Iraq and Shia groups, with a goal of bringing former insur-



GEN Raymond T. Odierno *assumed command of Multi-National Force-Iraq in September 2008. He previously served as the commanding general, U.S. Army III Corps, from 2006–08. He completed a 15-month deployment with III Corps in February 2008, during which he served as the commanding general, Multi-National Corps-Iraq. GEN Odierno was commissioned in the Field Artillery upon graduation from the U.S. Military Academy in 1976. During more than 33 years of service, he has commanded units at every echelon, from platoon to theater, with duty in Germany, Albania, Kuwait, Iraq and the United States. Command assignments include 2nd Battalion, 8th Field Artillery, 7th Infantry Division; Division Artillery, 1st Cavalry Division; and the 4th Infantry Division. Staff assignments include deputy commanding general, Task Force Hawk, Albania; director, Force Management, Office of the Deputy Chief of Staff for Operations and Plans, U.S. Army, Washington, D.C.; and assistant to the Chairman of the Joint Chiefs of Staff. GEN Odierno has master's degrees in nuclear effects engineering and national security and strategy from North Carolina State University and the Naval War College, respectively. He is also a graduate of the Army War College.*



During a July 4 naturalization ceremony at Camp Victory, Iraq, 237 servicemembers become U.S. citizens.

ents into the Iraqi political process, while also working to nprove relationships with regional neighbors.

Our full spectrum operations and constant pressure on extremist and terrorist networks have disrupted their operaons, degraded their capabilities and drastically reduced vilence across the country. Although extremists maintain a duced ability to conduct sporadic high-profile attacks, verall security has improved with historically low security cidents across Iraq. Tired of violence and malign external fluences, the Iraqi people continue to overwhelmingly rect attempts to reignite the sectarian violence that raged ross Iraq more than two years ago. Iraqis see through QI's attempts to decrease the population's confidence in e ISF, undermine the credibility of the fledgling democratic vernment, and inflame sectarian and ethnic tensions—all of which would reverse the security gains and civil and economic progress to date. Given the changing environmental dynamics, we are increasingly shifting our focus to stability operations, with supporting offensive and defensive operations outside the cities.

Our combined success in providing security and stability has produced an environment for the continued reconstruction of Iraqi civil and political society. In January 2009, Iraq held successful provincial elections in which Iraqis representing each of the major religious and political affiliations participated. Iraqis cast their votes based on issues, rather than sectarian divisions, and elected new, more capable leaders—another positive indication of the Iraqi people's desire to move forward.

In July, the Kurdistan Regional Government also held credible elections witnessed by international observers. The new provincial leaders now operate within a legal framework defined by a provincial powers law, which delineates power and responsibilities in the Iraqi federal system.

At the national level, the Iraqi representative government continued its



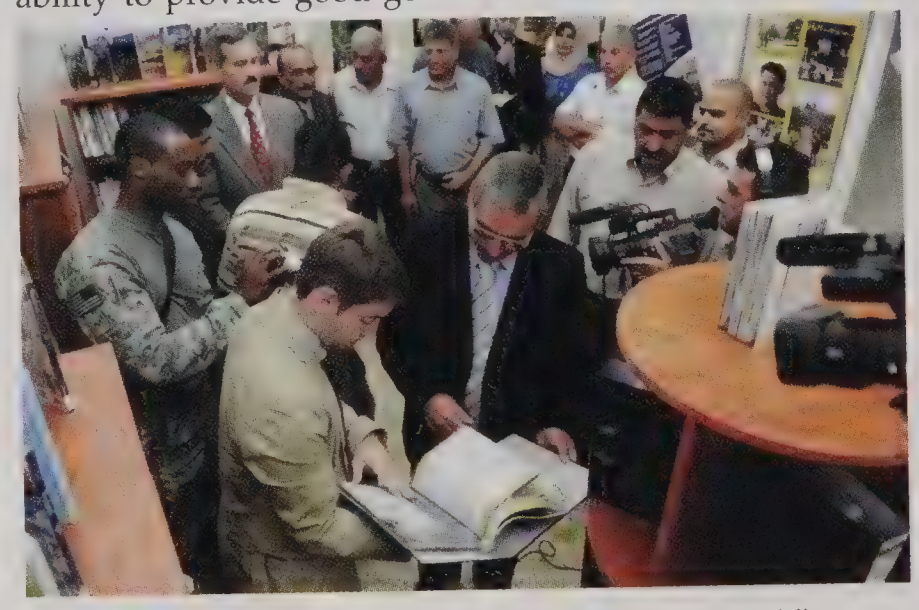
From left, BG Peter C. Bayer, chief of staff, Multi-National Force-Iraq, and British Maj. Gen. Bill Moore, Multi-National Corps deputy commanding general Iraqi Security Forces, listen as the Iraqi Minister of Defense, center, discusses the role that the new Combined Partnership Operations Center will play in the coordination of Coalition forces support of Iraqi security forces.



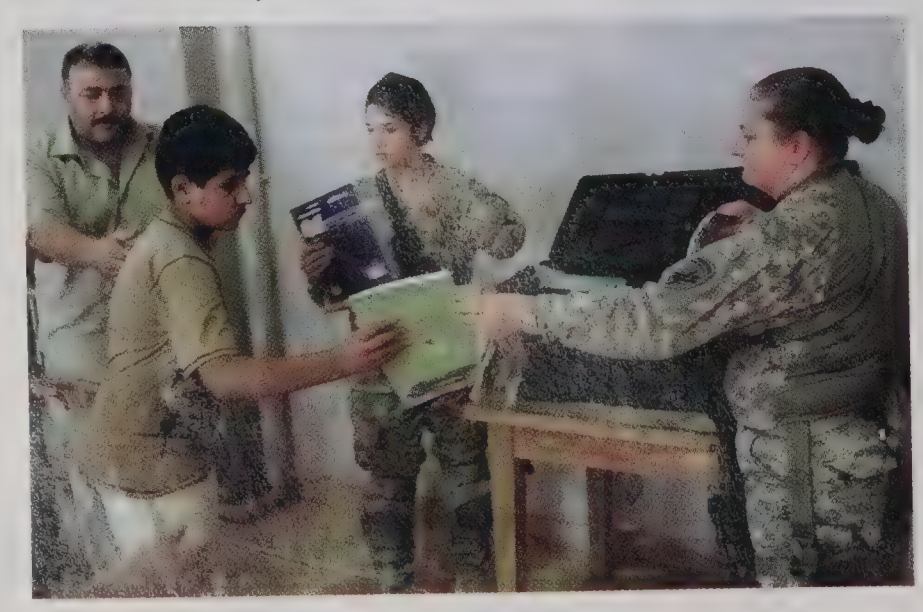
LTC Charles Costanza, commander of 1st Squadron, 7th Cavalry Regiment, orients GEN Raymond T. Odierno to the layout of Joint Security Station Istiqlal in June. During the trip, GEN Odierno walked through Husseiniya Market with soldiers from LTC Costanza's squadron.

maturation as the Council of Representatives provided closer legislative and budget oversight of the executive branch, demonstrating first steps towards a healthy balance of power inherent in democracies. As Iraqis prepare for national elections in January 2010, MNF-I is working closely with the ISF, GoI and USEMB-B to ensure a continued stable environment conducive to credible and legitimate elections and a peaceful transition of power that will allow Iraq to develop into a stable state in 2010.

Empowering national, provincial and local governmental ability to provide good governance and essential services for the Iraqi people, 23 U.S. State Department-led provincial reconstruction teams (PRTs) operate across Iraq with the support of MNF-I troops, embodying effective interagency cooperation. Staffed by more than 500 personnel from the U.S. Agency for International Development, as well as State, Defense, Justice and Agriculture Departments, PRTs have emphasized building provincial governmental capacity, developing economic projects such as microfinancing, and spurring agricultural development. Together, PRTs and MNF-I have worked with provincial leaders across Iraq to budget, develop and prioritize targeted commander's emergency response program projects. Given Iraqi budget shortfalls resulting from declining oil prices, these projects are proving essential to our overall sustainability efforts throughout Iraq.



Above, Bret Bruen, a member of the Salahuddin Provincial Reconstruction Team, and Tikrit University president Maher Salah Alawa (center) examine an information binder in the university's central library. Below, SGT Sue Sippel (right) and SGT Tessa Smith (center) hand out school supplies to local Iraqi children in the youth center in Mujamma, Iraq.



The ever-changing environment in Iraq requires a changing mind-set as well as tactics, techniques and procedures. U.S. forces carry out all operations with complete transparency, full coordination and open communication within an ever-maturing Iraqi rule-of-law environment. Our new mind-set, from platoon to force level and from private to general, places Iraqi forces firmly in the lead.

Iraqi security forces have proven that they are prepared to secure their own population, and they do so ever more frequently and with increasing success. With U.S. enablers and support, the ISF are planning and executing operations across the country, including the targeting and capturing of key extremists. Our soldiers, sailors, airmen and marines remain fully partnered with Iraqi units at all levels, observing and prepared to assist when requested. We continue to make the transition from primarily U.S.-led operations to partnered operations to Iraqi-led operations with U.S. enabler support.

Way Ahead

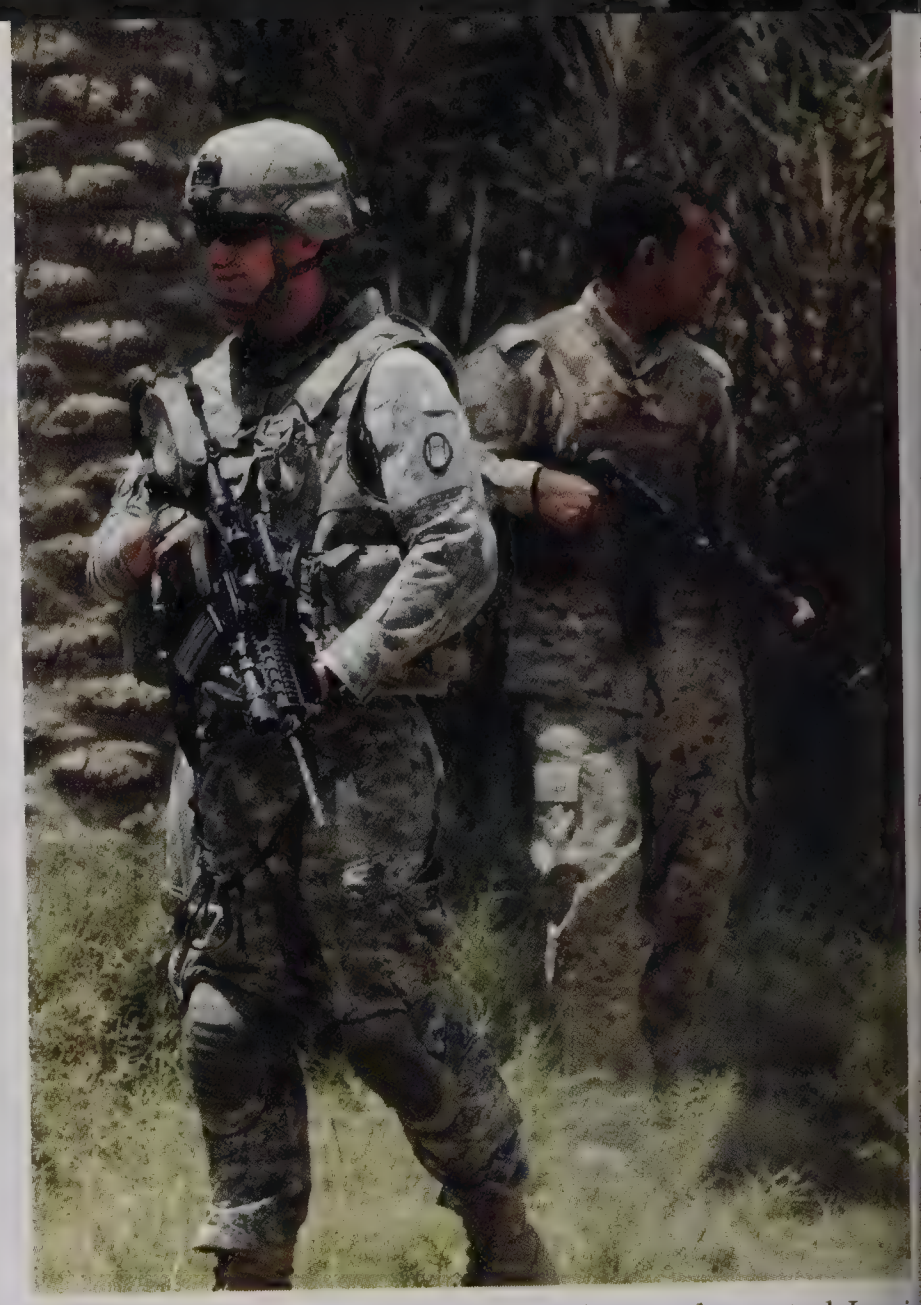
Collectively, we—USEMB-B and provincial reconstruction teams, GoI and provincial governments, U.S. and Coalition partners—have improved security, empowered elected



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SGT Jonathan Hinson, 1st Battalion, 113th Field Artillery Regiment, 30th Heavy Brigade Combat Team (left), and an Iraqi soldier secure the perimeter of a home south of Baghdad. The battalion conducted joint patrols from the start of its deployment in April in preparation for the implementation of the June 30 security agreement.

Iraqi leaders to provide an enhanced quality of life to Iraqi citizens and helped establish a foundation for continued economic growth. Over the next year, we will continue making the transition from full spectrum operations to stability operations with a change of mission on August 31, 2010, when U.S. forces will no longer conduct combat operations. BCTs will be restructured as advisory and assistance brigades (AABs), tailored by a significant change in mindset and operational structure to coordinate and achieve unity of effort across the range of security and civil support required in their areas of operations. In effect, PRTs will be the supported elements, with AABs in a supporting role. Although the first AAB, 1/82 ABN, arrives in September 2010, today in many locations across Iraq BCTs are executing this concept, working hand-in-hand with PRTs, the GoI and other international agencies. Concurrently, our units retain the combat power to carry out targeted counterterrorist operations and secure all of our efforts, civil and military.

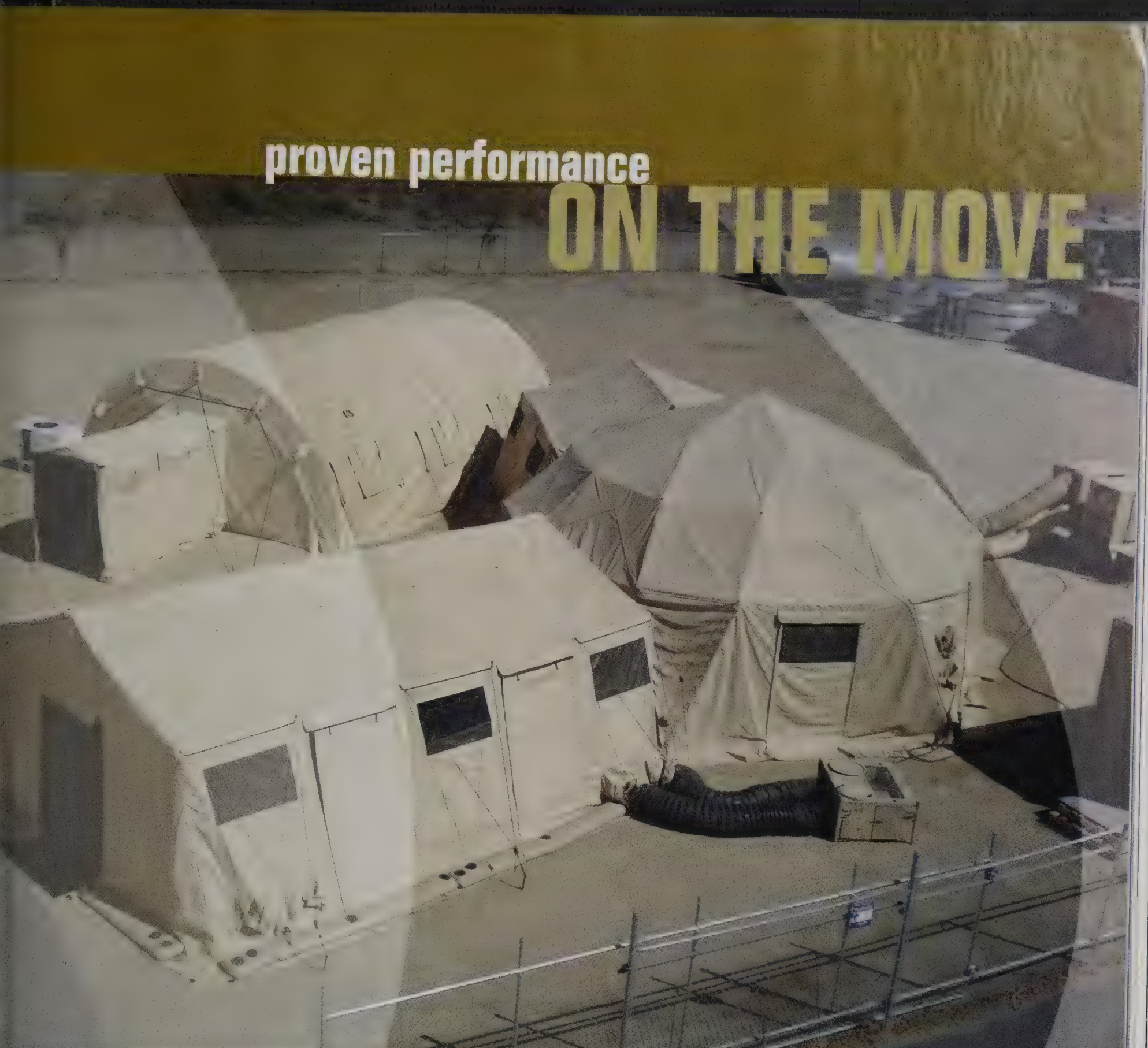
While our primary mission is security, we will also conduct a responsible drawdown, purposefully restructuring our force posture to support stability operations across Iraq in accordance with President Obama's guidance. MNF-I and its subordinate headquarters will merge into U.S. Forces-Iraq (USF-I), reducing our headquarters personnel by 40 percent. Overall, by August 2010, we will have a transition force of approximately 50,000 servicemembers with three division headquarters and six AABs in country, capable of supporting the newly seated Iraqi government's efforts to develop into a stable state.



LTG Charles Jacoby, commanding general, Multi-National Corps-Iraq, second from left, is given a walking tour of the newly paved and secured streets of Samarra, Iraq, by the Iraqi army, national police and local city leaders. LTG Jacoby checked on progress made with security and reconstruction projects and addressed citizens' concerns.

Much hard work remains in securing long-term security and a sovereign, stable and self-reliant Iraq. The primary drivers of instability—underlying challenges that could threaten progress—remain political. With the ISF, the troops of MNF-I continue to provide security and thus the opportunity for continued dialogue and long-term solutions to the varied inter- and intracommunal struggles over power and resources in Iraq, including internal boundaries, revenue sharing and communal rivalries. In addition, we remain vigilant against the resurgence of violent extremist groups and external influences, both of which seek to undermine the strength and stability of the GoI. These challenges are real, but the GoI and ISF—thanks to the efforts of thousands of dedicated U.S. servicemembers—stand ready to meet them.

I am impressed every day by every servicemember's enormous courage, unwavering dedication and boundless ingenuity. Through their hard work and sacrifice, we have progressed in helping our Iraqi partners foster sustainable security and build a bright and prosperous future for the Iraqi people. ★



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USAREUR: Building Partner Capacity for the Future

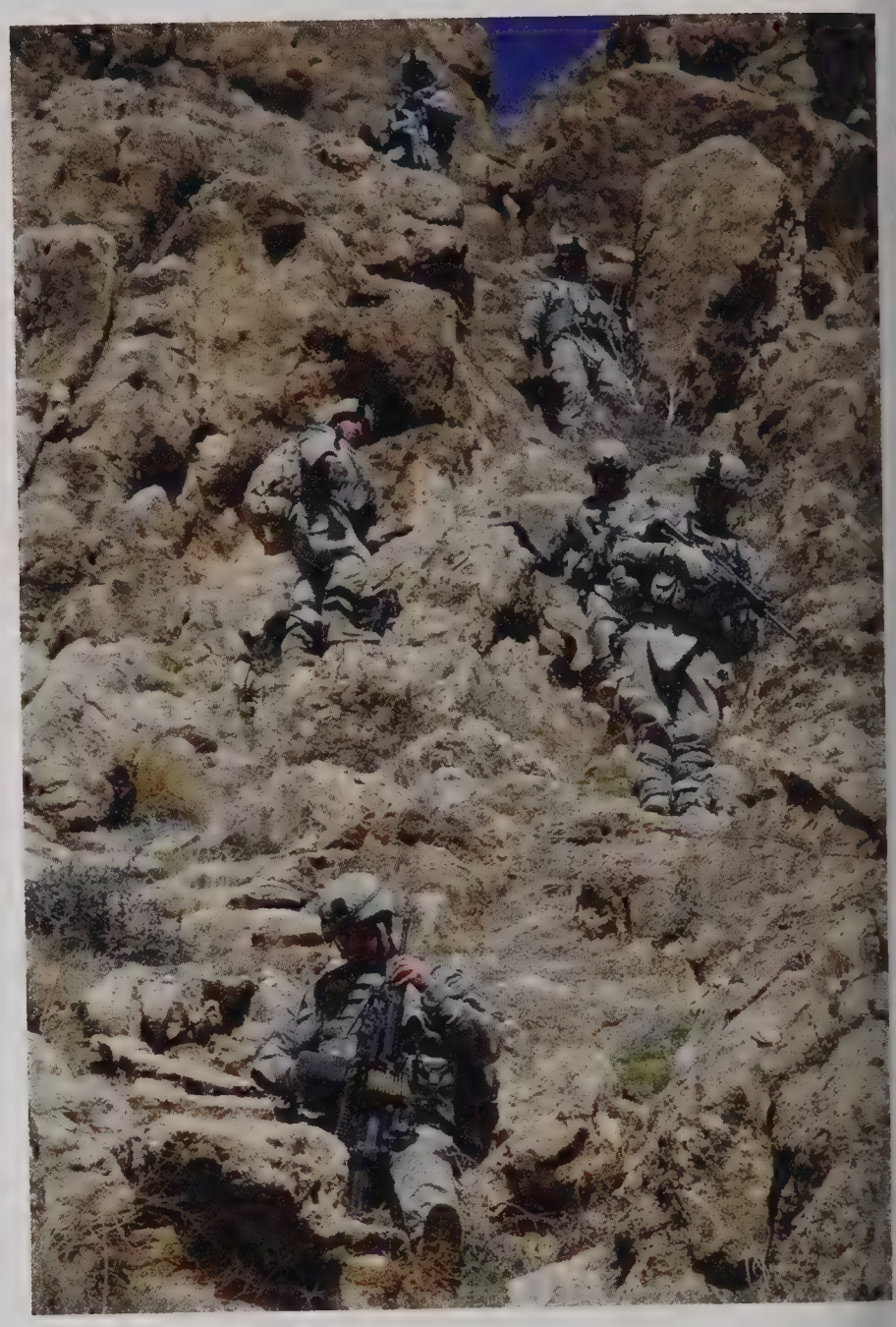
By GEN Carter F. Ham
Commanding General, U.S. Army Europe
and Seventh Army

Rising concerns over regional conflicts, globalization, climate change, illegal trafficking of people and material, and the proliferation of weapons of mass destruction are just some of the complex factors undermining stability in Europe. As European militaries prepare for a future of persistent conflict, they look to the United States for leadership. U.S. Army Europe (USAREUR) continues to provide this leadership through theater security cooperation (TSC) activities while transforming to meet emerging threats and security challenges. Today USAREUR is a dynamic, full spectrum force that is training and leading European land forces for the future.



USAREUR's history is intertwined with the 60-year legacy of the North





Above, SGM Mark Schindler, U.S. Army Europe Operations Directorate, G3 (left), discusses training with CSM Janos Zsoter of Hungary during the annual Conference of European Armies for Noncommissioned Officers. Right, soldiers from 1st Battalion, 4th Infantry, descend a cliff during a dismounted patrol in Zabul Province, Afghanistan.

Atlantic Treaty Organization (NATO). Once focused exclusively on the collective defense of its members, NATO has evolved into an alliance committed to out-of-sector operations—ensuring peace and preempting extremists from disrupting global security. USAREUR has also evolved—from a massive force with a largely conventional defensive mission to a smaller, agile and more flexible force that deploys from sanctuaries across Europe to conduct full spectrum operations. While doing so, USAREUR has maintained its leadership role in NATO through its continuous presence on the European continent.

USAREUR soldiers and families, like those everywhere, are experiencing the stress of repeated deployments. Over the past two years, more than one-third of USAREUR forces were deployed at any given time. Other USAREUR soldiers, such as the medical professionals at Landstuhl Regional Medical Center, Germany, provide enduring world-class support to operations in Iraq and Afghanistan and throughout the U.S. European Command (USEUCOM), U.S. Africa Command and U.S. Central Command areas of responsibility.



***GEN Carter F. Ham** has served as commanding general, U.S. Army Europe, since August 2008. He began his service as an enlisted Infantryman in the 82nd Airborne Division before being commissioned upon graduation from John Carroll University. He has served in Italy, in Saudi Arabia and on multiple tours in Germany. GEN Ham commanded Multinational Brigade North in Mosul, Iraq, from 2004–05 and the 1st Infantry Division from 2006–07. Before assuming his current position, GEN Ham was the director for operations, The Joint Staff.*

USAREUR is also in the midst of substantial rebasing initiatives. Since 2004, more than half of USAREUR's force structure has returned to the continental United States, relocated within Europe or wholly inactivated. Synchronizing deployment timelines with rebasing actions is a complex process that must be accomplished effectively to give our soldiers and families maximum predictability.

In addition to deploying worldwide to support overseas contingency operations, USAREUR soldiers play a pivotal role in increasing the interoperability and capabilities of our allies and Coalition partners. This is not a new task, but one that has taken on increased importance in the context of full spectrum operations. In the 21st century, America will confront complex, dynamic and unanticipated challenges to our national security and that of our allies and partner nations. The idea that one country can "go it alone" to ensure its own security against hybrid threats is untenable. The global economic crisis is forcing nations to make hard funding decisions, which has resulted in diminished defense budgets. Coalitions are the norm. Current operations in Afghanistan provide a salient example of the multiplicative power of coalitions as NATO's International Security Assistance Force (ISAF) ramps up offensive operations to reclaim extremist-controlled areas. Today nearly 90 percent of Coalition forces in Afghanistan come from Europe.

USAREUR—executing USEUCOM's strategy of active se

urity—conducts continuous TSC activities to improve the capabilities and nteroperability of our allies and partners. These range from attending non-ommissioned officer academy courses o multilateral exercises that increase ne professionalism and competencies f Coalition forces. This year alone, 'SAREUR will conduct more than 30 xercises with soldiers from 38 nations. From small-scale, squad-sized ele-ents teaching basic tactics to multi-ational exercises with as many as 10 ountries, each participating nation in-eases its ability to operate effectively part of a coalition force. The posi-ve effects on the warfighting capabil-es of these armies is powerful.

Exercise Regional Response in Azer-ijan was the first U.S. Army exercise that country, and Immediate Re-onse in the Republic of Georgia was other critical training event in the ucasus. Exercises conducted at non-S. training areas are enhanced by the Seventh U.S. Army nt Multinational Training Command (JMTC) exportable ining capability. With this organic capability, enabled by exportable instrumentation system, fully instrumented ining is possible anywhere in the world. This spring, TC participated in testing the Army's exportable train-capability concept with the 2nd Brigade, 82nd Airborne vision, at Fort Bragg, N.C. The same capabilities that prepared the 82nd for combat operations aid our Coalition partners in preparing for their own deployments.



Under American supervision, Slovenian soldiers tend a simulated casualty during a riot-control scenario at the Joint Multinational Readiness Center (JMRC) in Hohenfels, Germany. The Slovenians will use the peacekeeping skills they learn at JMRC in Kosovo.

Enduring TSC events that build on the successes of previous rotations are vital to increased regional security. "Episodic engagement" with our allies and partners will not generate the synchronized coalition forces required to win on today's asymmetric battlefield. USAREUR is in its fifth year of a well-established TSC initiative in Romania and Bulgaria. Each year, these exercises have grown in scale, scope and complexity. This summer, a task force from the 2nd Stryker Cavalry Regiment conducted bilateral training that increased interoperability among U.S., Romanian and Bulgarian land forces. In addition, the controlling headquarters was augmented by our sister services and allies to create a joint, combined staff. Exercises in Romania and Bulgaria provide valuable experience at both the staff and unit levels and have been enhanced by JMTC's exportable training capability. These exercises are Coalition enablers, introducing Romanian and Bulgarian forces to the latest tactics, techniques and procedures in preparation for their ISAF deployments. Ranges in both countries are not solely USAREUR training venues; they are also used by our sister services and other organizations, making them year-round training locations of choice.

JMTC is a valuable element of USAREUR's initiatives to build partner capacity. Soldiers at Grafenwöhr and Hohen-



U.S. and Bulgarian soldiers train together on the rocket-propelled grenade range in the summer 2008 training exercise in Bulgaria.



U.S. and Polish NCOs test teamwork and problem-solving skills on the Leaders Reaction Course as part of the Warrior Leaders Course at the Seventh Army Noncommissioned Officers Academy in Grafenwöhr, Germany.

fels bases in Germany routinely conduct mission rehearsal exercises and counterimprovised-explosive-device and operational-mentor-and-liaison team training. JMTC has conducted such exercises for deploying Polish, Romanian and other Coalition formations that have made positive gains in Afghanistan and other areas of operations. Coalition forces use these competencies to train the Afghan National Army.

JMTC is also home to the Warrior Leaders Course (WLC). More than 400 NCOs from 25 countries have attended the WLC. These soldiers develop a better understanding of the vital roles that NCOs play in our Army; when they return to their respective countries, they become role models for their nations' soldiers. A key NCO-led TSC event this year was the third annual Conference of European Armies for Noncommissioned Officers, cohosted by the USAREUR command sergeant major and his Polish land forces counterpart. Senior enlisted leaders from 38 European armies met to develop tools to enhance the professionalism of their NCO corps, improve training, and share lessons learned and best practices. One of USAREUR's major contributions to the Year of the NCO is demonstrating military professionalism to NCOs of other nations while influencing the development of the NCO corps of European armies.

JMTC was the primary location for Austere Challenge 2009 (AC09), the joint task force (JTF) certification exercise for USEUCOM. During this exercise, USAREUR headquarters was certified to perform as the core of a JTF/joint forces land component command—a significant step in our headquarters' modular transformation. In late 2008, USAREUR headquarters migrated to a functional staff alignment from a traditional Napoleonic design. During AC09, the new staff construct—with a joint manning document rounded out by our sister services—tested the staff's ability to successfully plan and execute full spectrum operations. AC09 also provided the first opportunity to test the reach-back capabilities of this headquarters. Certification as a JTF-capable headquarters adds a significant new dimension to USAREUR, USEUCOM and the total force.

As our Army becomes increasingly more expeditionary, cultural awareness and the ability to interact with many cultures with confidence have become more important. USAREUR soldiers, through repeated interaction with foreign militaries, develop the confidence to operate in unfamiliar cultural and social scenarios. Multinational training experiences instill the expeditionary mind-set required to operate in foreign environments. Similarly, our soldiers and families experience different perspectives and develop increased cultural awareness by interacting with host-nation citizens. These are benefits to a forward presence that cannot be replicated in the United States.

In addition to experiencing different cultures, USAREUR families enjoy a quality of life that is steadily improving. We are committed to taking care of the all-volunteer force, our families and our civilian workforce. We are upgrading living arrangements with renovated bathrooms, expanded kitchens and private laundry facilities. Modern schools, commissaries, post exchanges and child development centers are a reality. In Vicenza, Italy, we are building a new home for the 173rd Airborne Brigade Combat Team in preparation for its consolidation south of the Alps at Dal Molin Air Base. Grafenwöhr has a new look with recently constructed homes, barracks, administrative areas and Europe's largest post exchange. USAREUR is well on its way to completing rebasing initiatives over the next five years.

In the future, USAREUR will remain a valuable force provider to overseas contingency operations while continuing to help our allies and partners transform their land forces for the 21st century. As the recent conflict between Russia and the Republic of Georgia demonstrated, a lasting peace in Europe and Eurasia is tenuous. We remain a steadfast leader within the NATO alliance as we ask for unprecedented commitments to the war in Afghanistan and we continue to help our host nations and other European partners transform their land forces. These missions, which are of paramount strategic importance to our nation, will keep USAREUR relevant for years to come and ready to accomplish any mission, anywhere.

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Army National Guard: Integrated Missions

By MG Raymond W. Carpenter
Acting Director, Army National Guard

The essence of the Army National Guard (ARNG) is one of integrated missions—international and domestic operations. With concepts such as critical dual-use and citizen-soldier, our responses to international and domestic challenges merge together into an integrated dynamic. Building on our two pillars of strength—personnel readiness and equipment versatility—we conduct our integrated missions and accomplish our soldier-centric goals.



This year we established a Soldier Family Support and Services (SFSS) division, sharpened our focus on the quality of our force while meeting our quantity objectives, and developed some key operational and training initiatives. Our primary goals are to continue to stabilize our force by



A CH-47 Chinook helicopter assigned to the 1st Battalion, 178th Infantry Regiment, Illinois Army National Guard, delivers two loads of humanitarian aid supplies to a village in eastern Afghanistan's Laghman Province in May. Such missions build stronger relationships with residents of the province and help fight insurgency.

maintaining current structure, to improve equipment readiness, and to fortify personnel readiness by reducing the number of soldiers in the training pipeline and ramping up military occupational specialty (MOS) qualification rates.

Soldier and Family Support Services

Our new SFSS division coordinates the personnel blast and contaminant tracker, the yellow ribbon reintegration program, community-based Warrior Transition Units and enhanced family support activities.

The personnel blast and contaminant tracker capability serves as a personnel recording system for all service members involved in blast or contamination incidents, even in the absence of physical symptoms. If exposure has a long-term impact on a servicemember, data will be used for line-of-duty benefit evaluation. The blast and contaminant tracker can be expanded to all Army components as well as to the other services.

The yellow ribbon reintegration program, designed for servicemembers from all reserve components, provides information, services, referral and proactive outreach to soldiers, spouses, employers and youth throughout the entire mobilization—before, during and after deployment. From inception in 2008 through May 2009, the program has supported approximately 89,000 soldiers and 104,000 family members.

The Warrior in Transition mission is to heal soldiers as they make the transition back to their civilian lives as productive, responsible members of society. By providing leadership and transition assistance, our community-based Warrior Transition Units provide the venues for these wounded warriors to heal.

The Army National Guard remains committed to supporting the families of deployed soldiers throughout the deployment cycle. The ARNG has 325 family assistance centers strategically placed across all states and territories. These centers provide information, referrals and outreach to families of geographically dispersed active and reserve component members from all services.



MG Raymond W. Carpenter *assumed duties as acting director, U.S. Army National Guard, National Guard Bureau, Washington, D.C., in May. MG Carpenter began his military service when he enlisted in the South Dakota Army National Guard in 1967. He later joined the U.S. Navy, through which he attended the Defense Language Institute for 48 weeks to learn Vietnamese and served at the Naval Support Activity in Danang, South Vietnam. Upon completion of his Navy service, he returned to the South Dakota Army National Guard and was commissioned in 1974. MG Carpenter has commanded at all levels from lieutenant to colonel. In 1993, he became the executive officer of the more than 5,000-soldier Task Force Rushmore, a humanitarian mission in Panama. In 1999, MG Carpenter was awarded the Silver de Fleury Medal for his work at the national level in support of the Corps of Engineers. He was a founding member of the Director of the Army National Guard's Engineer Advisory team and served as its chairman until 2006. As the chief of staff and the assistant adjutant general for the South Dakota Army National Guard from 2000 to 2006, he was engaged at the senior-leader level in the largest mobilization of the South Dakota National Guard since World War II. From 2004 to 2006, MG Carpenter also served as the deputy commanding general for the Maneuver Support Center, Fort Leonard Wood, Mo.*

Quality of the Force

The Army National Guard has grown by approximatel 37,000 soldiers in less than four years. Our challenge i 2009 is to reduce our ranks to within the funded level c 358,200 soldiers and improve the quality of the force. B late May, the ARNG achieved an assigned strength of mor than 364,000. The ARNG currently is reducing assigne strength by ending misconduct waivers, lowering the max imum enlistment age from 42 to 35, and reducing enlis ment and reenlistment bonuses. The Army National Guar has also been increasing the average Armed Forces Qualif cation Test scores of new recruits, with 74 percent scorin above the 50th percentile from January through May 2009

We are streamlining our training pipeline. As of Ma



SSG Jon Scarber, a flight engineer, surveys the Red River along the North Dakota-Minnesota border from a CH-47D Chinook helicopter in April. The Montana Army National Guard assisted flood relief efforts near Grand Forks, N.D., and conducted orientation flights for aviators and soldiers.

5,300 soldiers are nondeployable until they complete ini-
al entry training (14,700 soldiers are in training and
),600 are waiting to attend training). The high number of
ondeployable soldiers in the training pipeline is a combi-
ation of a shortage of training seats available (especially
r low-density, high-demand careers such as aviation, sig-
al and military intelligence) and the availability of sol-
ers (about 25 percent are still in high school). The Army
as increased the number of available training seats, and
e ARNG has targeted enlistment incentives to improve
ip rates and streamline the training pipeline.

Key Training and Operational Milestones

This year has been exceptional for improving operational
d training initiatives, including the Muscatatuck Urban
aining Center (MUTC), our Patriot Academy program,
r general educational development (GED) Plus program,



David Carney (right) of the Redstone-Huntsville Chapter of the Association of the U.S. Army presents the 1st Sgt. John Ordway Leadership Award to Alabama Army National Guard 1SG Doug Witt. The annual award recognizes an active duty, National Guard and Reserve first sergeant.

our exportable combat training capability (XCTC), the innovative readiness training (IRT) projects and our agribusiness development teams.

Our MUTC, located in Indiana, is a full-immersion, 180-acre contemporary urban training center. Our training initiatives have been increasingly synchronized with our recruiting and retention challenges and opportunities. A good example is our Patriot Academy program at MUTC. In the Patriot Academy, soldiers complete basic combat training and then perform Title 10 active duty for operational support while completing high school diploma requirements, additional military training and some life skills training.

The GED Plus program has a residential school at the National Guard Professional Education Center at Camp Robinson, Ark. Students experience both a military basic training and a structured academic environment. To enroll in the GED Plus program, students must have completed ninth grade and be withdrawn from high school. Applicants must be 18 years of age (and ineligible to return to their local high school). In addition, students must be fully qualified for enlistment and achieve a minimum Armed Forces Qualification Test score.

The number of GED Plus students tested increased from approximately 700 in fiscal year (FY) 2006 to nearly 2,000 in FY 2007 and to more than 2,500 in FY 2008. In FY 2007, more than 1,400 students passed—a 73 percent success rate. In FY 2008, after opening an instructional lab, our success rate jumped to 95.6 percent, with more than 2,400 students passing. As of the end of May, the success rate hovered around

95 percent. The improvement is due in part to grouping students by ability, sharing best practices and implementing an instructional lab for specific student weaknesses.

The Army National Guard's XCTC is a group of field-training exercises in the contemporary operating environment. These exercises provide tough, realistic training for every participating soldier, and provide the means to achieve the required company-level certification and battalion battle staff proficiency for ARNG units during pre-mobilization training. This training incorporates the most current tactics, techniques and procedures used in theater.

The Office of the Assistant Secretary of Defense for Manpower and Reserve Affairs has provided ARNG with funding for IRT projects for combat training based on mission-essential task lists. This includes improving access roads on the Mesa Grande Indian Reservation in San Diego County, Calif., providing assistance at medical clinics on the Hoopa Valley Indian Reservation in Humboldt County, Calif., and assisting U.S. Customs and Border Protection on special projects such as maintenance upkeep of vehicles. This type of civil-military cooperation allows soldiers to gain real-world training while giving back to the community.

Our agribusiness development teams are self-contained volunteer units composed of Army National Guard soldiers with backgrounds and expertise in various sectors of the agribusiness field. They provide training and advice to Afghan universities, provincial ministries and local farmers, increasing stability and improving opportunities for Afghanistan's reemerging agribusiness sector. Several agribusiness development teams—from Missouri, Indiana, Tennessee, Kansas, Nebraska and Texas—are currently augmenting provincial reconstruction teams in Ghazni, Nangarhar, Khowst, Laghman, Paktya and Parwan Provinces.

Maintaining Current Structure

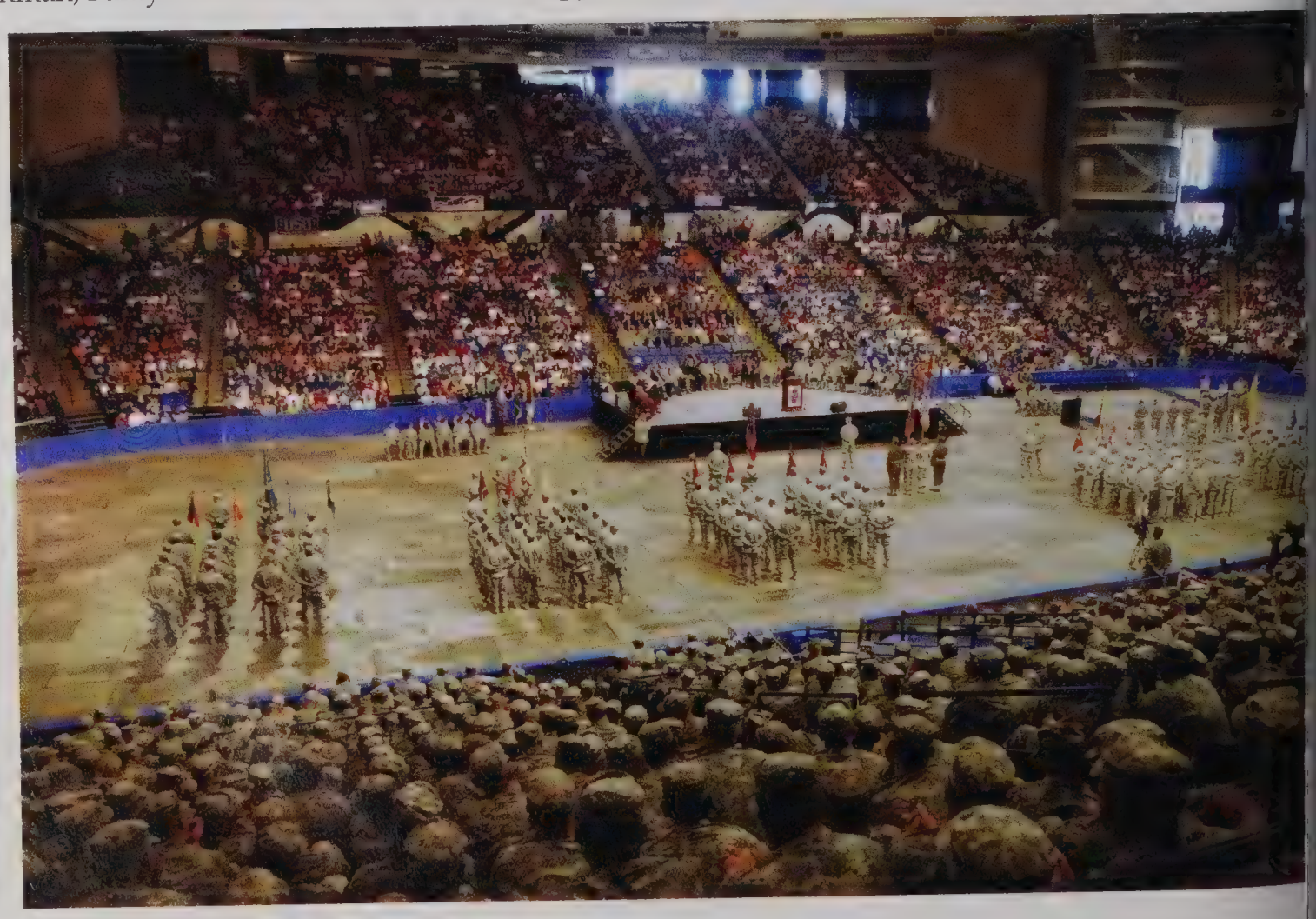
One of our primary goals is to provide incentives that will allow the ARNG to properly shape the force with increased readiness. This includes maintaining current structure without additional growth (growing readiness while balancing recruiting and retention). Retirements must be balanced with enlistments and reenlistments. Our units have undergone extensive reorganization to a modular force while adjusting to deployment demands.

The Army National Guard has restructured to a more agile modular force. Our brigade combat teams (BCTs)—as well as combat aviation, theater aviation, sustainment, maneuver enhancement and fires brigades—are being structured identically to those in the active Army and can be combined with other BCTs or elements of the joint force, facilitating integration, interoperability and compatibility. The modular force fits into the Army force generation model, providing more predictable deployment rotations. This year, the Army National Guard provides 28 BCTs (about 37 percent of total Army force structure).

Improve Personnel Readiness

The Army National Guard is a community-based, dual-missioned, operational force that provides the Army with ready units in a predictable cycle and responds to domestic missions for state governors. Our current challenge is to reduce our ranks to funded levels while improving readiness.

An important component of personnel readiness is full-time strength, which contributes directly to the readiness of ARNG units. The enduring conflict has placed higher demands on the ARNG and necessitates an increase in full-time strength to ensure unit readiness. In order to maintain appropriate levels of readiness for mobilizations as well as



Soldiers assigned to the 30th Heavy Brigade Combat Team, North Carolina Army National Guard, stand at attention during their deployment ceremony at the Crown Center in Fayetteville, N.C., in April, several weeks before leaving for Iraq.



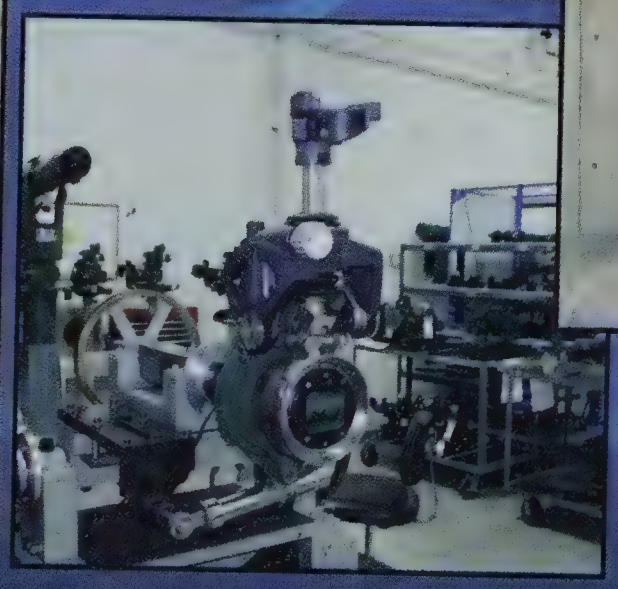
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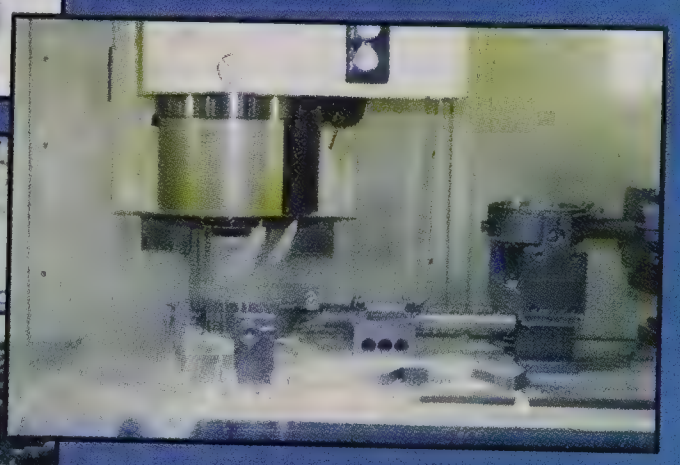
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Indiana National Guard SPC Jacob Morris builds a covering for a new water pump at Combat Outpost Penich as construction at the six-month-old base in Afghanistan's Kunar Province neared completion in July.

provide operational capabilities and strategic depth across the full spectrum of conflict, the ARNG requires an increase to currently programmed AGR and technician authorizations. ARNG full-time strength is programmed to add 1,170 personnel authorizations by FY 2013.

One of our Army National Guard personnel readiness objectives is to reduce the number of soldiers in the training pipeline while ramping up military occupational specialty qualification rates through the recruit sustainment program (RSP). Participants, mostly nonprior service recruits, drill with their state's RSP before basic combat training. They join their actual unit of assignment when they are MOS-qualified.

Improve Equipment Readiness

The Army has made great progress toward improving equipping levels within the ARNG and in modernizing existing equipment. Since FY 2006, the Army has dedicated significant resources to ARNG equipment procurement and modernization. ARNG units are now being equipped to the same standard as the active Army. Per the Army Campaign Plan, National Guard BCTs will be equipped at 100 percent by 2015, and support brigades at 100 percent by 2019.

Despite such success, the Guard needs to modernize the truck fleet, procure and field leading-edge battle command equipment and improve fill levels for a number of combat service support items such as water purification systems, generators, material handling equipment, field feeding systems, tactical ambulances and aviation ground equipment.

Critical dual-use equipment is often unavailable to governors due to rotational deployments. The Army and Army National Guard refine requirements for critical dual-use equipment and ensure that the states and territories can adequately protect the lives and property of American citizens following a catastrophic event.

In 2008, the Army made significant improvements to the equipment procurement and distribution processes to better track and manage resources, from request for funds through delivery of equipment to the unit level. Work is still needed to automate many of the Army's process changes and to embrace transparency and accountability.

The biggest reset change in 2008 was the allocation of funds directly to the Army National Guard, allowing the ARNG to conduct reset operations at home stations. The Army National Guard's initial allocation of $127 million, and $38 million from the Army, supported reset efforts. This streamlining enabled states to have their equipment immediately available.

The Army has programmed $23.9 billion for ARNG equipment for FY 2009 through FY 2013 to procure new equipment and modernize equipment currently on hand. Despite the level of funding programmed in the current future years defense program, ARNG equipping and modernization issues will remain. The ARNG is currently scheduled to receive about 21,000 of its 30,000 family of medium tactical vehicles by FY 2015. This 9,000-vehicle shortfall equates to about a $3.7 billion funding shortfall.

To continue accomplishing our dual mission, the Army National Guard must have modern equipment and continue to procure the latest equipment compatible with the enterprise advancements of the entire Army. In spite of the challenges the Army National Guard currently faces, the Army and Congress continue to demonstrate their commitment to equip our organization.

The ARNG has just ended a four-year period of solving the quantity of force challenge and is now making great progress on the quality aspect. We need to maintain that momentum. With 44,000 soldiers deployed every day for Operation Iraqi Freedom and 11,000 soldiers serving in Afghanistan—and thousands more at home battling fires and fighting floods—we believe we are the most ready, most motivated and most experienced Guard force in recent history. We stay motivated with great support from our communities and families, and whether we celebrate them at boot camp graduation or greet them at a retirement tribute, we readily acknowledge that our families are behind us every step of the journey.

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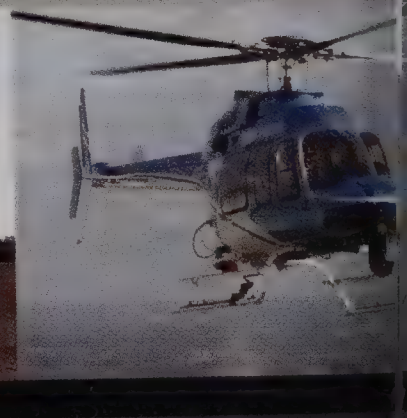


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The Army Reserve

A Positive Investment For America

By LTG Jack C. Stultz Jr.
Chief, Army Reserve/
Commanding General,
U.S. Army Reserve Command

As an operational force, the Army Reserve is a positive investment for America. Owing to the contributions of our citizen-soldiers and their families and prudent investments over the course of this decade, the Army Reserve has evolved from a strategic reserve to an indispensable operational force.



Making the transition from a strategic reserve to an operational force is a good value for this nation. We are undertaking the difficult and complex transition to operationalize an organization as large as our Army Reserve in a wartime environment—and we are making it happen! We have moved away from a legacy structure that served us well as a strategic reserve to a leaner organization that accommodates command and control of an operational force.

To maximize Americans' return on their investment, we have stream-



In celebration of the Army Reserve's 101st birthday and the Year of the NCO, Army Reserve soldiers (front row, left to right) SGT Marlon S. Cruz, SGT Kimberlee Morgan and SPC Martin C. Barbas were among 60 soldiers representing units from all 50 states who reenlisted on Capitol Hill in April.

lined our command-and-control structure, standing down nondeployable support commands and establishing in their places operational and functional commands. Streamlining command and control maximizes available forces to support Army operational requirements. Army Reserve units are now aligned to headquarters in the same way they are aligned on the battlefield. We restructured our institutional force by replacing seven institutional training divisions with three training commands to provide initial entry, military skill reclassification, and professional and leader development. We harvested additional structure as four two-star regional support commands assumed the base support operations functions for more than 900 Army Reserve centers across the country. These four support commands relieve operational commands of facility and garrison-type service functions, allowing the operational commands to focus on unit readiness and training.

Restructuring and rebalancing have also allowed us to add capability for new Army missions, such as stability operations. We are supporting the requirements of this expanding new mission by adding civil affairs professionals, transportation specialists, engineers and military police as part of our internal reorganization while adding approximately 16,000 operational spaces of capability for the future. Throughout this transformation, the Army Reserve continues to successfully meet its mission.

As our external transformation reaches culmination, we are looking to the future. We have adopted the Army enterprise approach of institutional management that optimizes performance across four core enterprises: human capital, readiness, materiel, and services and infrastructure. Already, we are realizing some significant benefits in using this approach. Our way ahead in the next year is strengthening capability across these core areas.



***LTG Jack C. Stultz Jr.** is chief of the Army Reserve and commanding general of the U.S. Army Reserve Command. Before this assignment, he commanded the 143rd Transportation Command. LTG Stultz entered active duty and, after completing the Engineer Officer Basic Course and Airborne School, was assigned to the 20th Engineer Battalion, where he served as platoon leader, executive officer and commander of Company B, 20th Engineer Battalion. He then left active duty to pursue a civilian career and also began his Army Reserve career with assignment to the 108th Division (Infantry One Station Unit Training). He deployed to Kuwait as commander of the 143rd Transportation Command (Forward), establishing initial reception, staging, onward movement and integration operations in support of Operation Iraqi Freedom. He was assigned as director of Movements, Distribution and Transportation, Combined Forces Land Component Command Kuwait, where he was responsible for port and ground transportation operations for the largest movement of forces since World War II. LTG Stultz is a graduate of the Command and General Staff College and the Army War College.*

Human Capital

Building personnel strength is the most important priority for the Army Reserve. In 2008, we recruited 44,455 soldiers and reenlisted 16,523 (111 percent of our annual goal) yielding a net gain of 7,142 in our ranks. We achieved the congressionally mandated end strength of 206,000 soldiers this year, more than a year in advance of the projected timeframe.

We recognize a significant gap in capability, however. Overall, the Army Reserve is short approximately 10,000 officers in the grades of captain and major. In the enlisted ranks we are challenged to develop and retain senior midgrade noncommissioned officers (staff sergeants and sergeants first class). We are working aggressively to grow and shape the force to overcome these challenges. One initiative the Army Reserve is advocating to combat the loss in midgrade rank



SGT Raymond S. Lopez Jr., a 143rd Expeditionary Sustainment Command (ESC) ammunitions specialist, plays a critical role in the U.S. troop expansion in Afghanistan. The 143rd ESC, a Reserve command, was the first ESC to deploy to Afghanistan.

a "continuum of service" for a fully integrated force—ac-ve and reserve. By presenting civilian and military career ptions, the Army Reserve hopes to create an environment r soldiers to move back and forth between components as eir personal lives and civilian careers dictate.

Our employer partnership initiative has produced a hu-an capital strategy for America. Employers and the Army eserve now share in the recruiting, training and develop-ent of quality individuals who contribute to our nation's efense, American industry, state and local governments, d the civilian service sector.

Readiness

After seven years of war, the most compelling evidence Army Reserve success is the confidence of battlefield mmanders in the quality and ability of our soldiers. We ll continue to seek the necessary resources to implement e Army Reserve training strategy to develop soldiers and ild cohesive, capable and effective units.

n 2008, we mobilized more than 27,000 warrior-citizens. developed regional and combat support training cen-s to enhance premobilization and unit readiness and in-ase the amount of time our units are available to combat-commanders. We increased the "boots-on-ground" time combat support hospital units by 45 days, military po-battalions by 37 days and combat engineer companies 31 days through streamlining pre- and postmobilization ning schedules and eliminating all unnecessary and du-cate activities. As a federal force with personnel and ipment nationwide, we provide a unique capability as a partment of Defense Title 10 first responder in times of nestic emergencies.

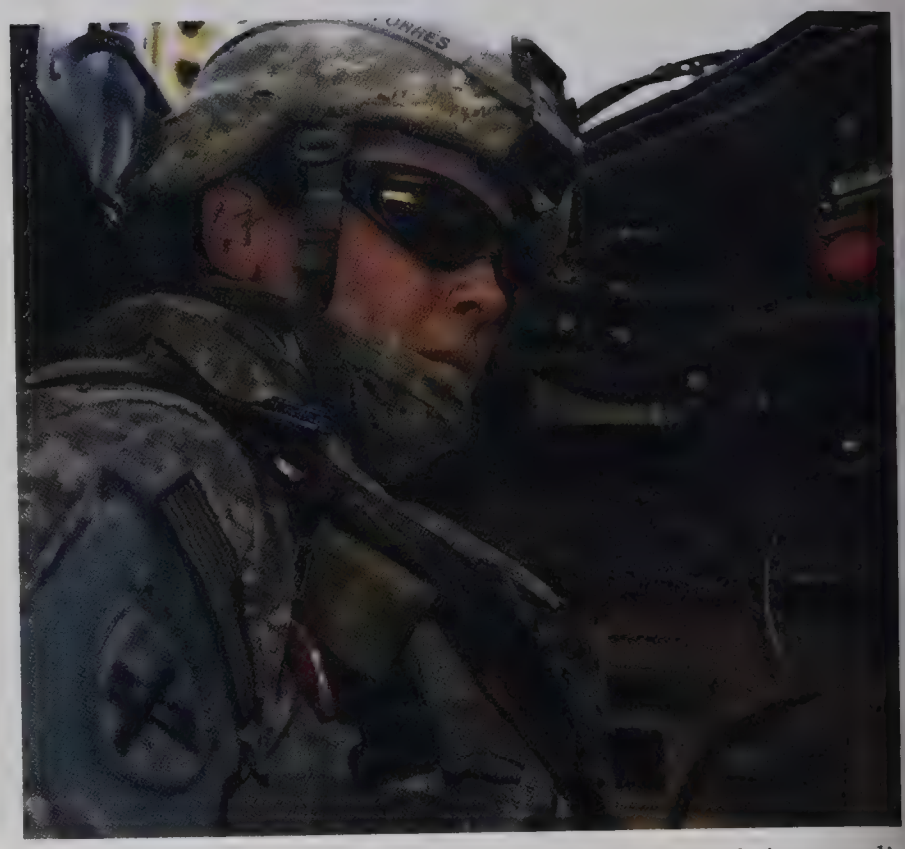
y improving how we gather information about the status rmy Reserve soldiers' health, we were able to identify implement two comprehensive treatment programs: tal readiness and whole-life fitness. Working across agen-and using civilian health care, we are treating dental blems and holistically addressing the well-being of sol-diers and families. This effort includes a mental-health component and is appropriately linked with our yellow ribbon soldier reintegration efforts.

Materiel

When preparing to perform a dangerous mission, our soldiers must have modern equipment and state-of-the-art training facilities. The Army Reserve is working hard to make these requirements a reality. During fiscal year (FY) 2008, we continued to improve our ability to support the Army Reserve training strategy and the Army force generation model. We fielded new equipment; repaired, reset and reconstituted unit equipment; adjusted equipment sets at regional training centers; realigned support structure (manpower, tools and support equipment) to sustain those sets; and continued to field additional aviation capability in accordance with the Army campaign plan. As we train and ready soldiers and unit teams, we strive to provide those teams with the best tools available to accomplish diverse and challenging national security missions. We attained or exceeded



SGT Gregory S. Ruske returns to his vehicle after an ambush in Kapisa Province, Afghanistan, in 2008. For heroism demonstrated during the attack, SGT Ruske became the fourth Army Reservist to receive the Silver Star.



Army Reserve SGT Danielle R. Torres, 304th Civil Affairs Brigade, receives instructions before taking her spot on the gun turret. SGT Torres was the gunner on the lead mine resistant ambush protected vehicle in the brigade's convoy security team in Iraq.

the Army standard of 90 percent availability for reportable equipment requiring maintenance. We recovered, repaired and serviced all redeployed equipment not inducted into national-level maintenance. Although we are able to meet the needs of our deploying units, looked at holistically, the Army Reserve faces monumental equipping challenges.

Services and Infrastructure

The services and infrastructure element of the enterprise encompasses those programs, facilities and systems that improve the well-being of soldiers and their families. Our Army Reserve families are our partners. They support their soldiers, and because we have their support, we are successful. Many of our families live far from an installation and lack access to basic services and family programs. That's why we are making a reality the concept my wife, Laura, has dubbed the virtual installation.

Designed to support Army Reserve families who live far from an Army post, this initiative will combine resources to provide—virtually—the same level of access to support they would expect to find on a military installation. It will include an Internet-based "installation" that families can visit on the web to obtain support and services. Other outlets in the community include mall kiosks or offices in veterans' centers, reserve centers or other locations staffed by full-time personnel and volunteers. To gain experience and test which format might best serve our families, we have identified eight pilot sites in both rural and urban areas.



SGT Cody Brunet, a carpentry specialist assigned to the 372nd Engineer Company, checks a Humvee during the 2009 U.S. Army Reserve Command Best Warrior competition at Fort McCoy, Wis.

Caring for our families is essential to maintaining readiness, and Army Reserve noncommissioned officers (NCOs) make sure that the soldiers and families in their charge are ready for the rigors of deployment. Not much happens in the Army Reserve without NCO involvement, leadership and guidance. It's often said they are the backbone of the organization, but because they are the primary and most visible leaders for the bulk of our service personnel, the term *backbone* hardly does them justice. They lead from the front, projecting the self-confidence, authority and enthusiasm needed to face the toughest challenges that come with fighting two wars simultaneously, while being the catalyst for the continuity of operations as our units realign.

This is why our Army Reserve NCO corps is among the best in the world. We give them the freedom to lead unlike any NCO corps around the globe. Military leaders in allied nations are continually amazed at the range of their technical skills and the breadth of responsibility they carry. Their values and talents are part of our skill-rich organization and their commitment to Army values translates into our success. We are recognizing our finest throughout 2009, the Year of the NCO.

Plans for the Future

In the midst of two ongoing wars and transformation efforts to grow, restation and modernize the Army, the Army Reserve is building new capability. In FY 2009, we initiated 12 Grow the Army projects, 25 Base Realignment and Closure (BRAC) projects, and eight military construction Army Reserve (MCAR) projects. We are programmed to maintain a similar pace in FY 2010 with 12 Grow the Army projects, 48 additional BRAC projects and 10 MCAR projects.

Army Reserve citizen-soldiers represent America's best and brightest. Our soldiers' and their families' commitment and willingness to sacrifice, at home or by carrying the fight to the enemy on desolate battlefields, allow Americans to pursue their dreams and live free from fear. America can make no better investment.

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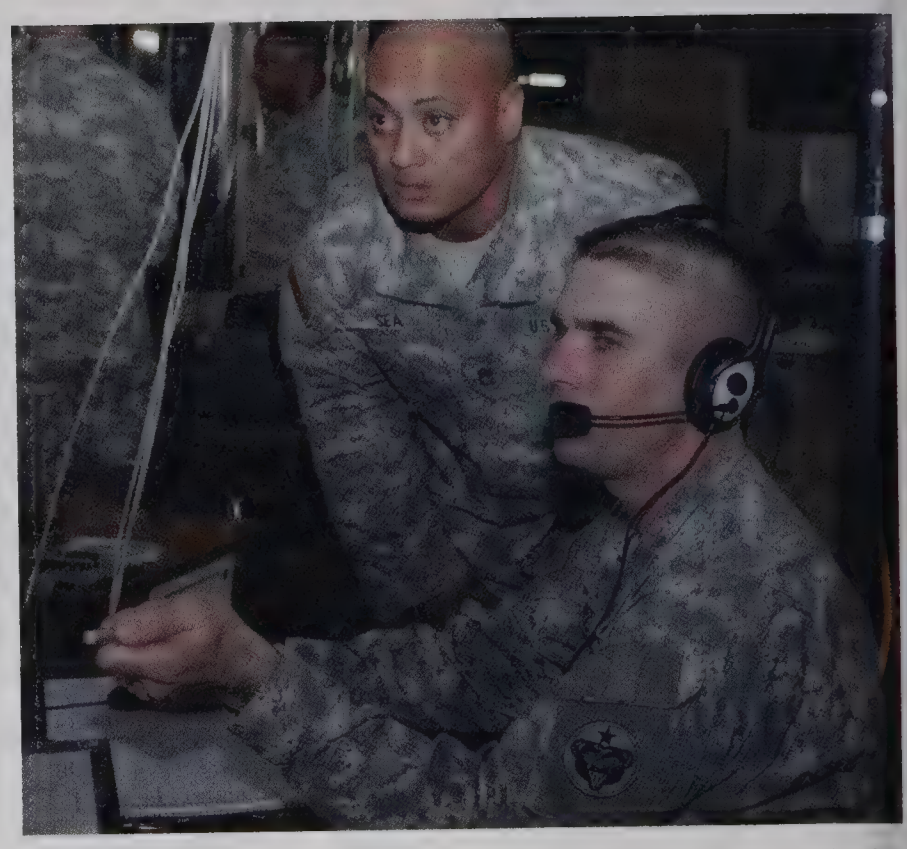
The Army in the Pacific

Evolution of Power Shifts While Noncommissioned Officers Lead

By LTG Benjamin R. Mixon
Commanding General, U.S. Army Pacific
and
CSM Joseph Zettlemoyer
Command Sergeant Major, U.S. Army Pacific

The Asia-Pacific region will greatly influence the future of the United States. According to the authors of *The United States and the Asia-Pacific Region: A Security Strategy for the Obama Administration*, "ongoing shifts in geopolitical power from West to East" are making "the Asia-Pacific region more important to the United States today than ever before. The region is already an engine for the global economy, and major Asian countries are becoming global economic and political actors." The United States must continue to iterate comprehensive policies incorporating all elements of national power—diplomatic, intelligence, military and economic—in order to advance our strategic objectives in the Pacific. U.S. Army Pacific (USARPAC), a forward-deployed theater Army headquarters and Army service component command (ASCC) for U.S.





SFC Faletoa Sea (left), U.S. Army Pacific (USARPAC) Fire Support, and SFC Matthew Ivacic, U.S. Army Alaska Operations directorate, discuss enemy movement at the combined operations/intelligence cell at Camp Asaka, Japan, during Yama Sakura-55.

Pacific Command (USPACOM), is uniquely positioned and already implementing a comprehensive strategy designed by USPACOM. Focused on bilateral and multilateral engagements while building relationships, this strategy will prove critical to meeting future regional requirements. USARPAC is also essential to maintaining mutual defense treaty obligations with important allies in the region. Along with ongoing theater security cooperation activities, USARPAC is transforming its structure and building combat capability to meet future security challenges. All the while, U.S. Army Pacific continues to support overseas contingency operations including those in Iraq, Afghanistan and the Philippines.

Transformation in the Pacific

In this Year of the Noncommissioned Officer (NCO), dynamic changes abound in USARPAC. USARPAC headquarters is composed of a main command post (MCP) with a deployable contingency command post (CCP) based in Hawaii. USARPAC will eventually become the single ASCC in the Pacific when its Title 10 responsibilities extend to the Korean Peninsula by 2012. Having a single, regionally focused, globally networked ASCC in the USPACOM area of operations designed to deftly handle the complex and difficult problems from the strategic to the operational is consistent with the Army Campaign Plan. With augmentation, the deployable CCP will be able to operate as a small-scale contingency joint task force (JTF) headquarters with missions, including peace enforcement and stability operations.

The relationship with the Eighth Army in Korea is evolving as we look ahead to post-2012 force structure and stationing. The Hawaii-based MCP will assume administrative control of the forward-based operational Army warfighting headquarters supporting Korea Command, currently U.S. Forces Korea. This concept will be tested through the Ulchi-Freedom Guardian exercise series, ultimately leading to the successful transfer of operational control of Republic of Korea forces to the government of Korea.

The Hawaii-based theater enabling commands (94th Army Air and Missile Defense Command, 8th Theater Sustainment Command, 311th Signal Command, 18th Medical Command and, after 2010, the 500th Theater Intelligence Brigade) are also developing relationships with their missile defense, sustainment, communications, medical and intelligence units, respectively, within the Pacific theater of operations. With this full complement of enabling commands, and a developing relationship with the 351st Civil Affairs Command in California and the 412th Theater Engineer Command from Mississippi, the Theater Army headquarters will be agile and robust enough to respond rapidly and effectively to a variety of small-scale contingencies, while at the same time providing reliable and responsive Title 10 support and facilitating Army support to other services for full spectrum operations in the area of responsibility.

As part of transformation, Army organizations in Alaska are also changing. The shift from an operational command post to a CCP eliminates the early entry command post element in Alaska. The U.S. Army Alaska (USARAK) headquarters will be a completely table of distribution and allowances-oriented organization focused on training, readiness and oversight of combat forces based in Alaska. Meanwhile, the theater enabling commands ar



LTG Benjamin R. Mixon *is the commanding general of U.S. Army Pacific. He began his Army career as a second lieutenant of Infantry upon graduation from North Georgia College in 1975. He has had increasingly more challenging and important command and staff positions with the Army throughout the United States, Europe and the Pacific. He commanded Hawaii's 25th Infantry Division, and he served as commanding general of Task Force Lightning and Multi-National Division-North in Iraq. LTG Mixon has master's degrees in public administration from Western Kentucky University and in military art and science, theater operations, from the U.S. Army School of Advanced Military Studies at Fort Leavenworth, Kan.*



CSM Joseph Zettlemoyer *joined the Army in 1979 and completed his basic and advanced training as a cavalry scout at Fort Knox, Ky. Prior to coming to Hawaii, he was the command sergeant major of the U.S. Army Armor School, Fort Knox. CSM Zettlemoyer's military education includes the Command Sergeants Major Course, U.S. Army Force Management Course and National Defense University/Joint Forces Command Keystone Course. His civilian education includes an associate's degree in administration/management from Regents College and a bachelor's degree in business administration from Touro University.*



SSG Travis Snook, a small-group instructor assigned to the Noncommissioned Officer Academy at Schofield Barracks, Hawaii, gives basic marksmanship instruction to an Indonesian army soldier during the Warrior Leaders Course in Cipatat, Indonesia.

xpanding their involvement with their functionally ligned units in Alaska. USARAK will also continue to neet its homeland defense requirements in support of Alaska Command and Joint Task Force-Alaska.

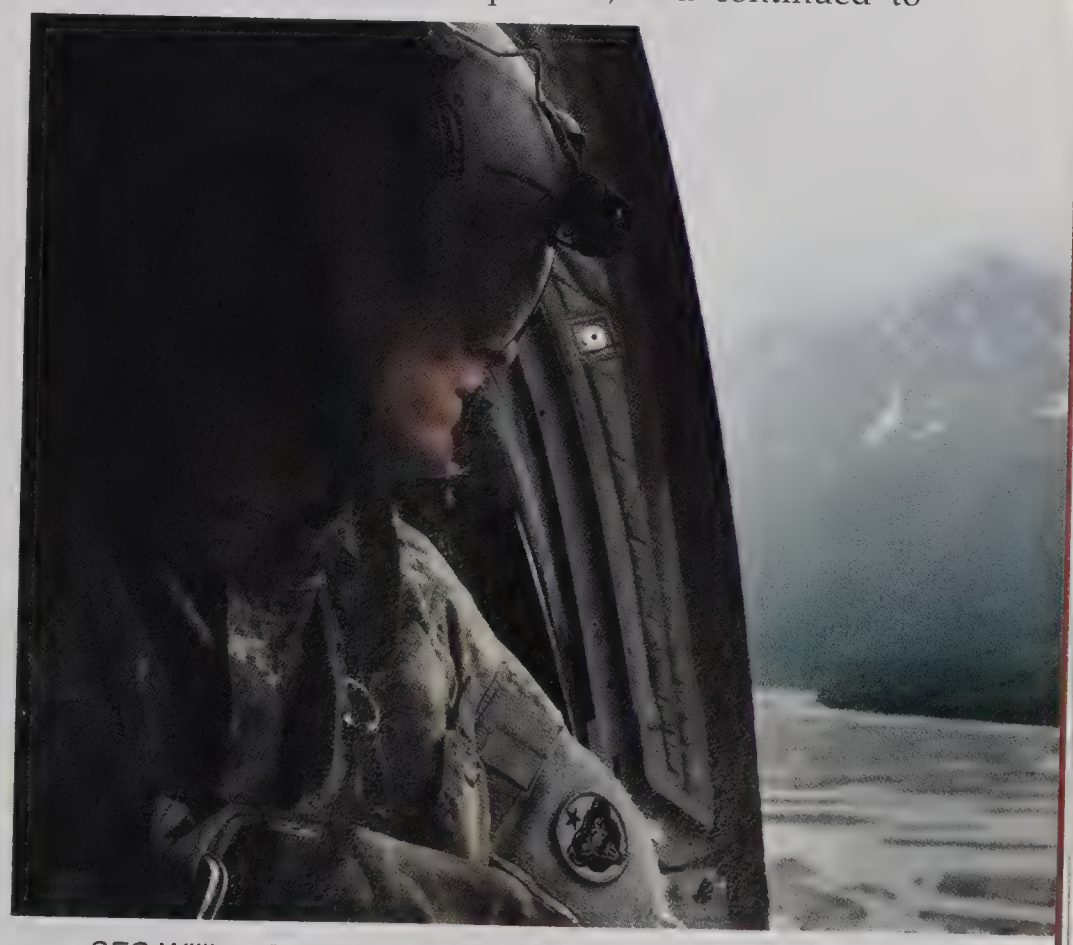
USARPAC is also continuing to cultivate its relationship vith Japan, a crucial ally developing its own deployable eadquarters capability in the form of the Central Readiess Force. The U.S. Army Japan headquarters has suported the development of the I Corps Forward. This relavely small command post is associated with I Corps by eraldry only and maximizes its role by focusing on its retionship with the Japan Ground Self Defense Force GSDF) while building deployable capability. At its end ate, I Corps Forward is envisioned as another USARPAC perational command-and-control capability to deploy in pport of contingencies in the Pacific theater.

USARPAC continues to serve as the PACOM executive gent for Joint Task Force-Homeland Defense (JTF-HD). F-HD continues to develop its defense support of civil thorities, furthering its ability to address all hazards, natal and man-made, to meet the critical engagement reonsibilities of humanitarian assistance and disaster relief the PACOM homeland defense joint operations area. is is similar to U.S. Northern Command's role in the conental United States, particularly as defense coordinating icers and elements are established and linked with JTF-D operations in the Pacific. The realignment and integran of the U.S. Army Reserve 9th Mission Support Comand's (MSC) mission with JTF-HD is progressing. The rganization of the 9th MSC will enable the headquarters continue its reserve component oversight mission of Reve units and operations in the Pacific and will maximize inherent capability of its members to support the coun—best served by individuals with vested interests, que skill sets and ties to the community.

cific Theater Army's Security Cooperation Program

JSARPAC is heavily engaged in support of USPACOM's ater strategy. Theater security cooperation program (TSCP) activities—fully developed, coordinated, resourced and executed within the USARPAC theater campaign plan in support of USPACOM's theater campaign plan—are crucial peacetime operations that emphasize partnership, presence and military readiness. Through numerous exercises and exchanges with almost all of the 41 countries in the Asia-Pacific region, these engagements reassure friends and allies of America's long-term commitment to peace and stability here. The sheer dispersion, diversity and increasing frequency with which Army personnel deploy into these partner countries to engage and train call for a larger pool of available forces to support the full array of activities, from senior-level forums to small-unit and staff exchanges.

The contingency command post affords USPACOM a significant resource as it plans for small-scale contingency operations and executes an expanding TSCP in an exercise setting essential to preventing future conflicts. During Yama Sakura-55, USARPAC exercised this operational capability for the first time by replicating a joint force land component command headquarters, and continued to



SFC William Penley, a flight engineer stationed at Fort Wainwright, scans the Alaskan terrain from a CH-47 Chinook during Northern Edge 2009, a large-scale exercise hosted in Alaska to improve command, control and communications among the armed services.



As part of the "Sounds of Freedom," which features military units running in formation, more than 2,500 troops pass by the Aloha Tower near the start of the 25th Annual Great Aloha Run, an 8.15-mile trek along Honolulu Harbor.

build this capability through Cobra Gold 2009 in a complex, multinational exercise environment. These exercises reinforced great strides in jointness and incorporated reach back to the MCP in Hawaii for Title 10 support to units throughout the Pacific, while synchronizing and leveraging the full capability of the theater enabling commands.

Due to multiple rotations in support of overseas contingency operations on the part of USARPAC-assigned units in the Army force generation cycle, exercises in the Pacific rely heavily on a mix of active and reserve component units. Exercises also highlight the expanded role and essential contribution by the NCO Corps to the success of training. One example is the global peace operations initiative (GPOI) training conducted as part of Cobra Gold. This training was fully manned and executed by a team of six NCOs, with a senior NCO as an observer—the first time training was conducted without any involvement of commissioned officers. The team trained 30 Royal Thai army soldiers, 10 Indonesian soldiers and five Japanese soldiers. Indonesia's participation supported the country's continued steps to professionalize its NCO corps, which began with the graduation of 44 Tentara Nasional Indonesia (TNI) Angkatan Darat noncommissioned officers from a Warrior Leaders Course conducted by U.S. Army Pacific NCOs in August 2008.

The TNI saw a return on its investment in NCO professionalization during the year's GPOI capstone exercise, Garuda Shield, when its NCOs led the rigorous tactical lane training exercises for nine participant nations. With six additional nations participating and two other nations observing, Garuda Shield met its goal to maintain and improve U.S. and Indonesia peace support operations-related readiness and interoperability. Following this success, USARPAC partnered with the Malaysian army in Keris Strike, which also had a peacekeeping and humanitarian assistance theme. Indonesia and Malaysia make substantial annual contributions to United Nations missions throughout the world, and the continued professionalization of their armies as well as increased interoperability with the U.S. Army make them increasingly critical strategic partners.

NCOs from USARPAC's partner nations are also learning from observing how the U.S. Army operates and, in many cases, will step up and take charge, rising to the occasion to accomplish the mission. One of the advisors for the Cobra Gold GPOI was a sergeant major from the Singapore army. With all of the positive interaction from this year's bilateral and multilateral exercises, USARPAC envisions more NCO-led training and inclusion of parts of the U.S. Army's NCO Education System and development in future exercises.

Japan also continues to reforge the JGSDF NCO corps, which started with the adoption of a command sergeant major program of education in 2008. Sergeant Major of the Japan Ground Self Defense Force Katsuo Shimoasa believes command sergeants major are the key to a professional NCO corps. Recognition and respect for the professionalism and dedication of JGSDF noncommissioned officers was highlighted by the invitation of Command Sgt. Maj. Tsunemi Eto, 8th Division of the JGSDF, to participate in the pinning ceremony of U.S. Army SGT Raul Gallegos, 83rd Ordnance Battalion, 10th Support Group, 8th Theater Support Command, in February at Camp Ohyanohara, Japan, during Operation Orient Shield.

Besides expanding the depth of the TSCP down to the enlisted leaders of our partner armies, senior-leader engagement between the U.S. and Indian Armies has led to strengthening the relationship, as evidenced by a more robust Yudh Abhyas bilateral exercise with the Indian army. U.S. troopers and their Indian counterparts have the opportunity to integrate the latest U.S. Army combat systems—including a complete command, control, communications, computers, intelligence, surveillance and reconnaissance suite—into the capabilities of an increasingly important partner. Furthermore, the Indian government recently agreed to pursue an end-use monitoring agreement for U.S. military equipment in July 2009. This will allow the Indian army to gain experience



SGT Douglas M. Kollar, team leader, 2-14th Cavalry Regiment, helps 4-year-old Carlin (Mykel) Stokes, son of SPC Lili Stokes, Headquarters and Headquarters Company, 4th Special Troops Battalion, try on a Kevlar helmet at Canby Field, Schofield Barracks.



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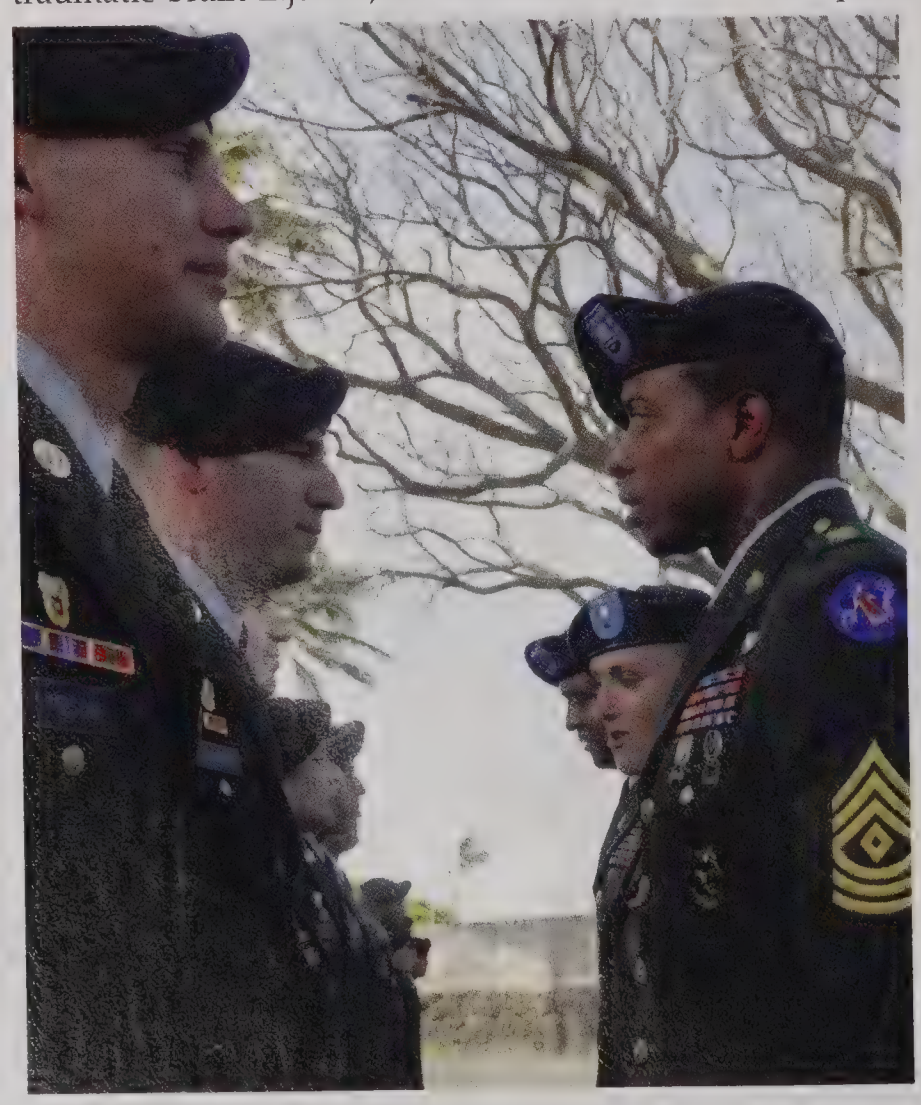
PHOTO COURTESY OF US ARMY

with future technology—one of the eight initiatives the Chief of Staff of the Army agreed upon with his Indian counterpart—which can ultimately enhance interoperability between our armies.

Army Communities in the Pacific

USARPAC soldiers and their families continue to play a large role in military communities throughout the Pacific region. Community support for the military in the Pacific is exemplified by Hawaii's recognition of 2009 as the Year of the NCO with the passage of resolutions by both the Hawaii State Senate and House of Representatives. Hawaii was the first state to honor Army NCOs in this manner; Alaska followed suit with a joint resolution in June. In addition, both states' governors signed Day-of-the-NCO proclamations, demonstrating a great appreciation for USARPAC's NCO Corps, recognizing the vital roles NCOs play in our Army and acknowledging that our NCO Corps serves as a model for other armies in the Pacific.

This year also saw every USARPAC brigade-sized unit along with numerous enabling units either deployed to or redeploying from overseas contingency operations. As deployments continue, USARPAC is incorporating a holistic approach for readiness by addressing the mental, physical and spiritual needs of soldiers, civilians and families. Pacific Regional Medical Command and Tripler Army Medical Center are also taking a closer look at the long-term effects and treatment of post-traumatic stress disorder, traumatic brain injuries, substance abuse and suicide prevention. In addition, resources for health care have been improved and made available to remote locations in the Pacific to facilitate support of reserve component soldiers.



1SG James Holms (right), first sergeant, Special Troops Battalion, USARPAC, checks a soldier's uniform during an in-ranks inspection at Fort Shafter, Hawaii.

As part of its strategy to meet mission and infrastructure requirements, USARPAC's Pacific training areas initiative implements training resources and improves training areas and ranges throughout the Pacific theater to enable Army training for full spectrum operations and include other service training requirements in the development of joint training plans. Significant investment—more than $555 million and 30 military construction projects—is producing a training infrastructure that is second to none. State-of-the-art digital training ranges are supporting USARPAC's "Arctic Warriors" with a fully instrumented, distributed training environment, enabling soldiers in Alaska to leverage training opportunities at Forts Wainwright and Richardson, and at the Yukon and Donnelly Training Areas. In addition, Alaska Command's Joint Pacific Alaskan Range Complex affords Army Alaska soldiers the unequalled opportunity to integrate into a fully instrumented joint training environment.

One of the biggest ongoing improvements in the USARPAC community is the sustainable residential development resulting from a partnership between the Army and developer Actus Lend Lease. The privatization partnership represents the largest single residential project in the Army's portfolio and will consist of nearly 7,900 homes when complete. More than 2,000 new homes and two new communities have been completed since the 10-year initial development plan began in 2005. Upon completion, Hawaii Army families will reside in more than 5,300 new and more than 2,500 renovated homes, and enjoy amenities in nine new community centers. All new homes feature solar hot-water heaters, and new homes with detached garages have photovoltaic (PV) systems. The energy produced by PV systems benefits the entire Army Hawaii family housing (AHFH) community, providing 15 to 30 percent of the community's needs, or up to 6 megawatts of power. When development is completed, our families will be part of one of the largest solar-powered communities in the world.

In July, AHFH completed the military's first Leadership in Energy and Environmental Design Gold-certified home. The next initiative is to construct a Leadership in Energy and Environmental Design for neighborhood design. This national pilot will assist in setting national standards for sustainable neighborhood design, and homes are projected for completion this month. Privatization also continues to contribute to local economies by creating jobs for construction, management and maintenance of facilities.

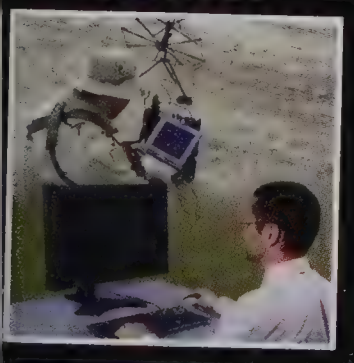
The size of Army forces in the Pacific has tripled in the past five years, reflecting an increase in Army capability available to the Pacific theater. USARPAC's combat-ready, technologically advanced and culturally astute Theater Army forces are prepared to advance stability, security and cooperation in the Asia-Pacific region. USARPAC stands as a powerful force ready to be the catalyst for bringing security, regional stability and partner-building capacity in the Pacific. One Team!

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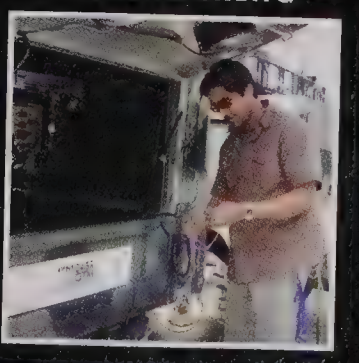
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Army Strong—
AMEDD Strong—NCO Strong

By LTG Eric B. Schoomaker
Commanding General,
U.S. Army Medical Command
and
The Surgeon General of the Army

It is my privilege to lead more than 70,000 highly trained, highly motivated professionals in a $10 billion international health promotion and health-care delivery command. U.S. Army Medical Command (MEDCOM) protects our warriors from illness; treats and rehabilitates wounded, ill and injured soldiers on the battlefield and in garrison; trains, develops and equips medics to perform effectively across the full spectrum of operations; maintains the health of soldiers' families; advances medical science through research and development; and cares for retired servicemembers and their families, all with responsible stewardship of taxpayer resources. In 2009, the Year of the Noncommissioned Officer, we take special notice of the contributions of our NCOs, who make up 18 percent of the Army Medical Depart-





SPC Andrew Lee, a medic with the 325th Combat Support Hospital, applies a tourniquet to a 'wounded' leg during the Army Reserve's Global Medic Exercise.

ment (AMEDD) and play critical roles in every aspect of our support for the Army family.

With a worldwide mission covering the entire range of health-care services from garrison to the battlefield and home again, we need a tool to synchronize and focus our efforts.

We use the Balanced Scorecard, which keeps everyone working toward the same goals and avoids wasted effort. I'd like to highlight some of the things AMEDD is doing to achieve the six strategic ends identified on our scorecard.

Improved Healthy and Protected Families, Beneficiaries and Army Civilians

We are dedicated to providing patients the right service at the right time in the right venue—on the battlefield, in our garrison medical treatment facilities and through the TRICARE networks.

We are determined to identify and remove barriers in access to care, realizing that some will have relatively simple solutions, while others will require more time.

The MEDCOM AHLTA provider satisfaction initiative is smoothing some of the rough edges in DoD's electronic health record system (known as AHLTA), making it easier for providers to use. As a result, patients will see more effective and timely health care, better patient safety and improved record security.

To better support our transforming Army, we are restructuring Medical Command from four regional medical commands in the continental United States to three regions aligned with supporting TRICARE regions. This will allow us to more effectively synchronize our efforts with our TRICARE managed care support contractors in order to better



***LTG Eric B. Schoomaker** assumed command of U.S. Army Medical Command and became the Surgeon General of the Army in December 2007. LTG Schoomaker previously served as the commander of Walter Reed Army Medical Center and the North Atlantic Regional Medical Command. He has also commanded U.S. Army Medical Research and Materiel Command and Fort Detrick, Md.; Southeast Regional Medical Command and Dwight David Eisenhower Army Medical Center, Fort Gordon, Ga.; the 30th Medical Brigade headquartered in Heidelberg, Germany; and Evans Army Community Hospital at Fort Carson, Colo. He has also been chief of the Army Medical Corps. In 1979 he began his Army career as a research hematologist at Walter Reed Army Institute of Research. He has also served as assistant chief and program director of the Department of Medicine at Walter Reed Army Medical Center; medical consultant to the Headquarters of 7th Medical Command, Heidelberg, Germany; deputy commander for clinical services at Landstuhl Army Region Medical Center, Landstuhl, Germany; chief and program dire tor of the Department of Medicine and director of primary ca at Madigan Army Medical Center, Tacoma, Wash.; director medical education for the Office of the Surgeon General/Hea quarters MEDCOM conducting a split operation betwe Washington, D.C., and Fort Sam Houston, Texas; director clinical operations at MEDCOM Headquarters, Fort Sam Hou ton; and command surgeon for U.S. Army Forces Comman Fort McPherson, Ga. LTG Schoomaker received a BS from t University of Michigan at Ann Arbor and his medical degr from the University of Michigan Medical School. He complet his Ph.D. in human genetics in 1979. He is certified by t American Board of Internal Medicine in both internal medici and hematology. He has completed the Combat Casualty Ca Course, Medical Management of Chemical Casualty Ca Course and AMEDD Officer Advanced Course, and has grad ated from the Command and General Staff College and the U. Army War College.*

integrate private-sector care as well as support Army force generation and improve readiness. We also are combining elements of the Veterinary Command and the U.S. Army Center for Health Promotion and Preventive Medicine into a Public Health Command for unified control of public-health assets and a synchronized effort toward protecting and advancing the health of our beneficiaries and communities. Whether ensuring safe and healthy food, controlling zoonotic diseases, identifying toxic materials that present a hazard or educating people about healthy lifestyles, our preventive medicine forces are truly on the front line of efforts to build and maintain a healthy Army family.

Optimized Care and Transition Of Wounded, Ill and Injured Warriors

As the Secretary of Defense has stated, aside from winning the war we have no higher priority than the care of our wounded, ill and injured warriors—our warriors in transition (WTs). Having established an effective system of 36 distributed Warrior Transition Units (WTUs) at major installations and medical treatment facilities and nine community-based WTUs with the Army National Guard across the nation, this year we are focusing on individual WT plans for transition to the next phase of life and work. This year we launched the Comprehensive Transition Plan initiative for WTs. A team of physicians, case managers, specialty-care providers and rehabilitative therapists, together with the soldier and his or her family, develops an individually tailored goal to help that soldier return to duty, make the transition to civilian life, or continue rehabilitation through the Veterans Health Administration or civilian medicine.

We recently activated the provisional Warrior Transition Command, led by BG Gary Cheek, a career Artillery officer, and his senior enlisted advisor, SGM Ly Lac. This command provides policy oversight to warrior transition units and coordinates programs that benefit wounded, ill and injured soldiers and their families.

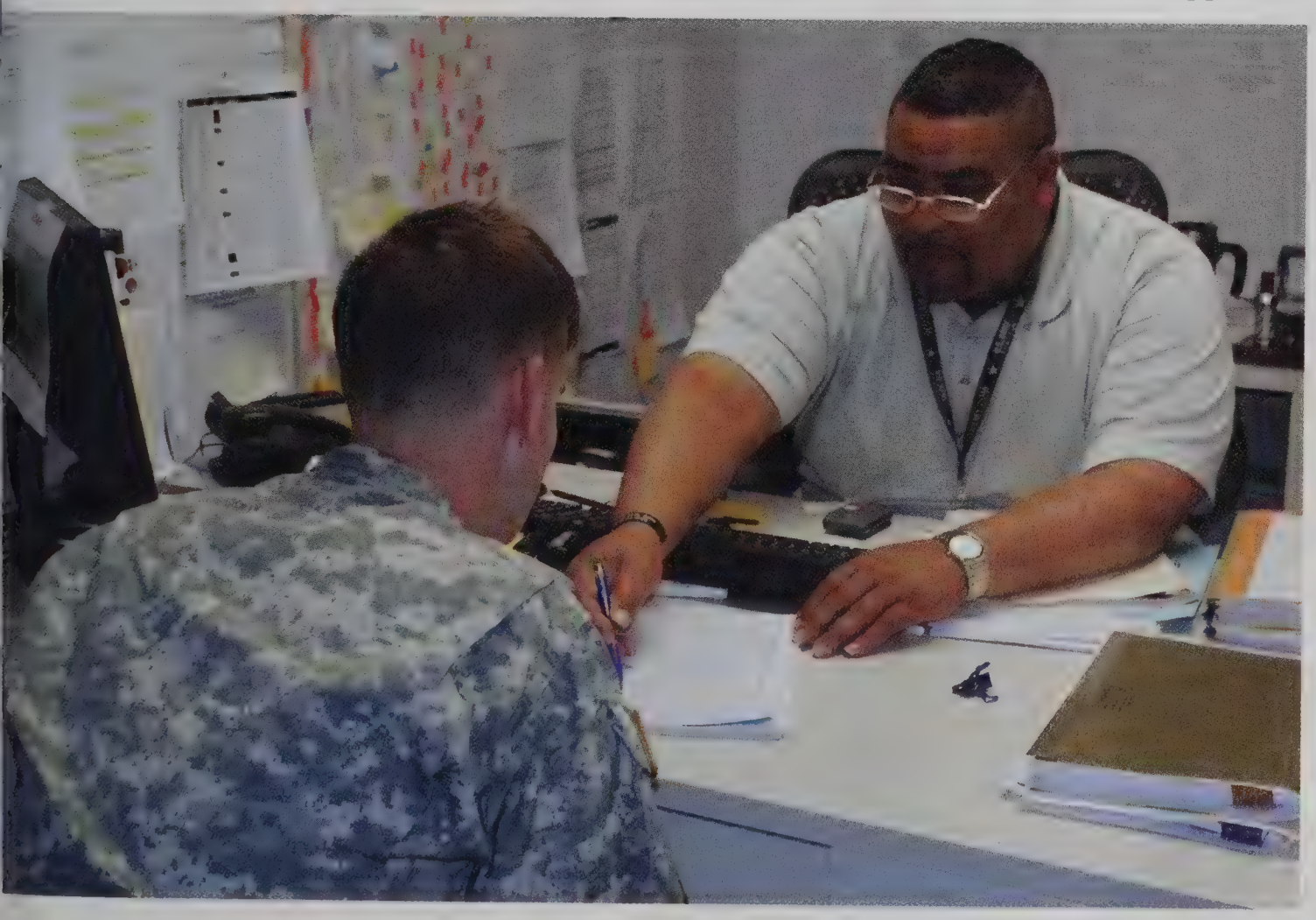
MEDCOM employs ombudsmen who operate independently, answering to MEDCOM and the Army for service to wounded warriors and their families, cutting through red tape. These ombudsmen, most of whom are former medical noncommissioned officers, know the system. They work with the triad of leadership—hospital commander, installation commander and Warrior Transition Unit commander—to ensure that the needs of soldiers are met.

The MEDCOM Soldier Transfer and Regulating Tracking Center (STARTC) supports the Warrior Transition Command and Warrior Transition Units with the timely transfer of recovering warriors closer to home. The STARTC conducts global patient tracking and assists in redistribution of warriors to and between units.

Improved Healthy and Protected Warriors

In addition to the efforts previously mentioned in establishing a Public Health Command to ensure an injury and illness-free Army community, in 2009 MEDCOM continues to support the Army leadership's efforts to improve the mental health of the Army. We are making bold, sustained efforts to improve soldier and family resilience, reduce any stigma associated with seeking behavioral health care, and provide multidisciplinary care addressing specific behavioral-health needs promptly and expertly.

Research initiatives, including the Walter Reed Army Institute of Research Land Combat Study and annual Mental Health Advisory Team missions to theater, guide efforts to provide behavioral-health support. A wide range of initia-



William Kyle, physical evaluation board (PEB) liaison officer at Fort Hood, Texas, explains the PEB process to a soldier.



SGT David Dasilma, Pacific Regional Medical Command, and SPC Jonathan Jordan, Great Plains Regional Medical Command, were named the winners of the 2009 U.S. Army Medical Command NCO and Soldier of the Year Best Warrior competition held at Madigan Army Medical Center and Fort Lewis, Wash.

tives are under way to meet that need, including Battlemind Training, post-deployment health assessments and reassessments, combat stress control units, and the hiring of more behavioral health-care providers. Details are available at www.armymedicine.army.mil.

We are working with the Army Staff on initiatives to reform the Medical Evaluation Board and Physical Evaluation Board processes, to reduce the number of soldier suicides, and to introduce a comprehensive soldier fitness program that will improve all-around fitness the way we have traditionally maintained physical fitness.



Veterinarian CPT Elizabeth Williams (left) and PFC Roderick Aldrich, both from the 218th Medical Detachment (Veterinary Service), prepare Kitti, an Air Force military working dog, for repair of a damaged tooth at an air base in Southwest Asia.

Responsive Battlefield Medical Force

War requires agility and adaptability, and so does the medical response to war. We used to talk about getting care to a patient in the "golden hour," the first hour after injury. Now we are focused on the "platinum 10 minutes" when the combat medic provides immediate lifesaving care. The AMEDD Center and School gathers lessons learned from the battlefield and incorporates them into training so that our medics can be as prepared as possible for what they may face in combat. This training—along with new technology such as tourniquets, bandages that promote lifesaving blood clotting, airway devices and a longer needle for decompression of chest injuries—has saved many lives. Medical simulation training centers give our medics the benefit of the most advanced, realistic training to prepare for combat. In a recreated battle atmosphere, they treat wounds on mannequins that breathe, bleed and react—and die if treatment is incorrect.

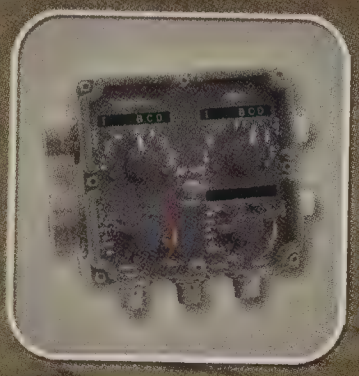
New medical evacuation policies supported by data collected by a special project of the Joint Theater Trauma System, are delivering soldiers to treatment facilities faster and in better medical condition, reinforcing our commitment to the best and most timely care.

One development of the past year must note is the awarding of Combat Medic Badges to members of air ambulance crews. Previously reserved for medics who served in combat with ground units, this award now also recognizes the heroism of medevac per

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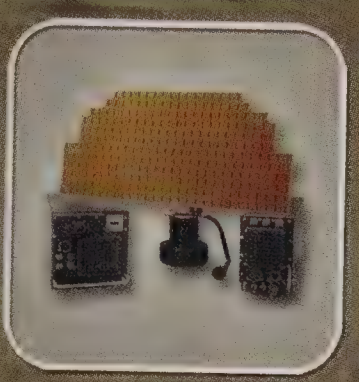














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U.S. Army Medical Command's SPC Daniel Farrier moves a 'casualty' along before engaging targets during the Department of the Army Non-commissioned Officer and Soldier of the Year Best Warrior Competition.

sonnel like SSG Matthew Kinney and SSG Peter Rohrs, both of whom received the Silver Star in the past year for rescuing wounded troops under fire in Afghanistan.

Improved Patient and Customer Satisfaction

Our performance-based adjustment model (PBAM) provides financial incentives for our medical treatment facilities to improve efficiency, patient satisfaction and quality. As a result, the Army is the only military service to achieve planned workload gains every year since 2003. Of equal importance in our incentives under PBAM are rewards for providing the right *kind* of care—either care that complies with the most rigorously, scientifically proven care ("evidence-based practice") or care that provides the best clinical outcome for the patient—what we all want from encounters with practitioners in our system of health care.

Congress has been extraordinarily generous with military medicine and the Army over the past year. We now have funding to build new hospitals at Fort Benning, Ga.; Fort Riley, Kan.; and Forts Hood and Bliss, Texas. Terrific new joint service facilities are being built in San Antonio, Texas, and the National Capital Region. This is the largest investment in modern hospitals in the past two decades. The quality of our facilities is a tangible demonstration of our commitment to military families and our medical staffs.

As a result of such initiatives, a recent survey reported that more than 60 percent of TRICARE Prime enrollees rated their health plan at an eight or above on a scale of zero to 10, leading the nation in satisfaction with private and public managed care programs.

Inspire Trust in Army Medicine

Patients' trust in our care and service is an essential part of our caring for them—it is an irreplaceable element of any covenant between patients and caregivers. Our people are critical to the success of Army Medicine. They experience the rewards of performing the AMEDD mission, are privileged to provide care for the best patients in the world, see the quality of people with whom they work, and commonly conclude they can have no better career. Thus MEDCOM is one of the leading Army commands in retention. Most of our regional medical commands completed their fiscal year (FY) 2009 retention missions in March.

Getting people into Army Medicine to begin with is a challenge, as there is great competition for people with the skills and dedication we require. Army Recruiting Command created a medical recruiting brigade last year, uniting the command structure for battalions that recruit for AMEDD. They recruited 108 percent of mission for health-care professionals during FY 2008. We also have a civilian human resources and recruitment branch within MEDCOM working on our equally hard-to-fill civilian professional positions.

Let me cite one example of the kind of warrior-medics we have. SSG Christopher Waiters received the Distinguished Service Cross for heroism when a Bradley fighting vehicle was hit by an improvised explosive device near Old Baqubah, Iraq. He ran through enemy fire and climbed into the burning vehicle four times. His clothes were charred, the bottom of his boots melted and 25 mm rounds were cooking off inside the vehicle, but he kept going back until he had retrieved two wounded soldiers for treatment and the body of another soldier who was killed.

Such courageous, skilled, dedicated and devoted people are a constant inspiration to me—and AMEDD is full of them. We are Army Strong, AMEDD Strong, NCO Strong—working every day for our great warriors, their families and the retired soldiers who have given us so much. There is no nobler calling. ★

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Army Special Operations: Setting the World Standard

By LTG John F. Mulholland Jr.
Commanding General,
U.S. Army Special Operations Command

As we prepare to celebrate our 20th year of service to our Army and nation—one-third of that time spent at war—the men and women of U.S. Army Special Operations Command (USASOC) continue to make great contributions worldwide. The operations tempo for Army special operations has never been greater and is not likely to decrease in the near future. Operating with a strong road map for development, USASOC remains committed to maintaining the world's finest ground special operations force. With the backbone of impeccably trained, seasoned noncommissioned officers, USASOC forces take quiet professional pride in executing missions with excellence, honor and valor.



USASOC provides trained, ready Army special operations forces (SOF)



An Afghan National Security Force member monitors insurgent activity as a U.S. special operations joint terminal attack controller radios the coordinates of the insurgents' mountaintop lookout position to an F-18C Hornet pilot in Kandahar Province, Afghanistan.

to support the geographic combatant commanders, the theater special operations commands and ambassadors around the world. Though only composing approximately 5 percent of our Army, USASOC is the largest of the service components that make up U.S. Special Operations Command and provides approximately 70 percent of the special operations personnel in U.S. Central Command's theater as well as approximately 63 percent of America's total overseas military commitments.

Each day, elements of three of the five active duty Special Forces Groups, units from the two National Guard Special Forces Groups, one Ranger Battalion, some 36 special operations aircraft, and more than 35 civil affairs (CA) teams and 35 psychological operations teams and sustainment brigade logistics units are deployed around the world. In addition, the U.S. Army John F. Kennedy Special Warfare Center and School (USAJFKSWCS) manages the training program to put more Special Forces (SF), civil affairs and psychological operations soldiers into the force.

As with all U.S. military forces, eight years of continuous combat operations in the war on terrorism have had an impact on Army special operations units, personnel and families. For example, currently 222 of the Army's 228 continental U.S.-based operational detachments "A" (ODA) are committed to supporting operations worldwide, either deployed or preparing for deployment. USASOC's ability to manage that stress on the force is directly attributable to the high caliber of our NCO Corps.

The honor of 2009's designation as the Year of the NCO is well deserved. USASOC has a higher proportion of NCOs in its ranks than most military commands. Army special operations NCOs have proven they are adaptable, resilient and innovative, consistently executing missions outside of traditional skill sets to the highest standards. They serve as trainers, advisors, executors and leaders of the most critical missions. The majority of our NCOs possess years of operational experience. The benefits of that experience cannot be overstated. The Army's SOF are currently the best the nation has ever seen, and our NCOs are at the heart of Army special operations' extraordinary capabilities.

To manage our commitments, USASOC is building the additional force structure necessary for the years ahead. In fiscal year 2009 alone, USASOC has grown substantially with the addition of more than 1,100 personnel, many of them to new formations.

These manpower increases will include new capacity for the 160th Special Operations Aviation Regiment (SOAR), one of the most heavily committed SOF units in the U.S. military. Throughout their history, the "Night Stalkers" of the 160th SOAR have delivered special operations personnel to the doorsteps of our nation's enemies. The unit has developed new tactics, techniques and procedures that often migrate to other U.S. Army aviation units, thus contributing to the overall increase in Army aviation capabilities. The new 4th Battalion will be equipped with the newest SOF version of the Chinook heavy transport helicopter, the MH-47G, and the newest version of the Black Hawk utility helicopter, the MH-60M.

Special Forces Command stood up the first new SF units in two decades. The 5th Special Forces Group (SFG) added its 4th Battalion in 2008; 3rd SFG formed its 4th Battalion in August. The remaining three additional battalions will b



LTG John F. Mulholland Jr. *assumed command of U.S. Army Special Operations Command in November 2008. Prior to commanding USASOC, LTG Mulholland served as commanding general of Special Operations Command Central at MacDill Air Force Base, Fla. He previously served as chief, Office of Military Cooperation-Kuwait; commanding general, U.S. Special Forces Command (ABN); and deputy commanding general, Joint Special Operations Command. He holds a bachelor's degree in history from Furman University and master's degrees from the U.S. Army Command and General Staff College and the National War College.*

completed by 2012. The result will be an active duty SF force by 2013 with 360 ODAs, as opposed to only 270 on September 11, 2001. The long lead time for growth reinforces the SOF truth that special operations forces cannot be mass produced. The current requirements for Special Forces also underscore the need for new battalions in the 19th and 20th SFGs. We continue to modernize our National Guard battalions, key contributors to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF).

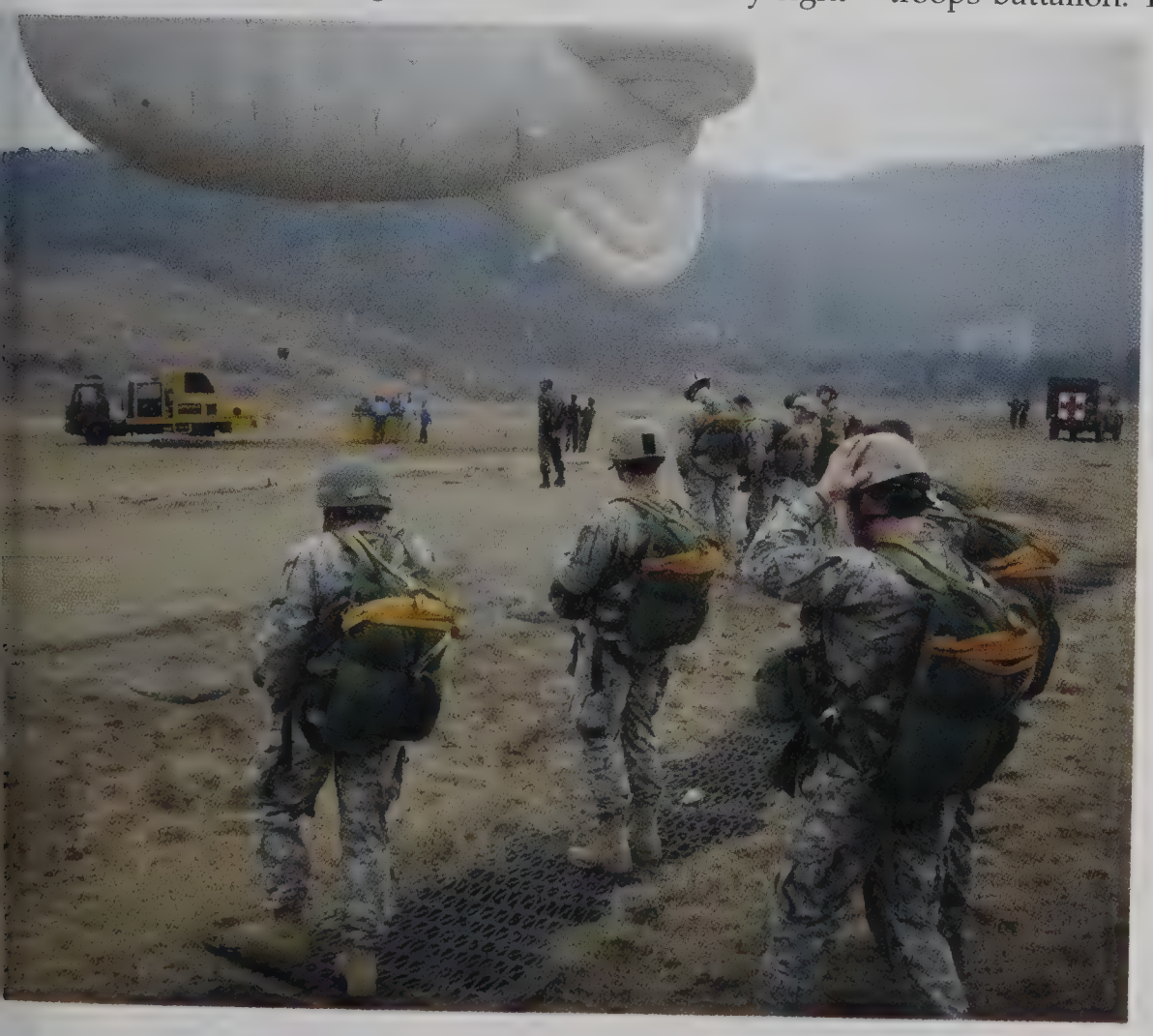
The addition of a new active duty battalion to each group has meant the Special Warfare Center and School has needed to produce 750 new SF soldiers every year. As USAJFKSWCS meets the training demands, Robin Sage, the culminating exercise of its SF qualification course, marks its 35th anniversary this year. Robin Sage is the world's foremost unconventional warfare exercise and remains the foundation of Special Forces training. The relevance of USAJFKSWCS' programs, whether technical, cultural or in foreign languages, is demonstrated daily by Army special operations personnel on missions worldwide.



Soldiers from the Special Operations Command and Fort Bragg, N.C., perform a fast rope demonstration during Joint Service Open House 2009 on Andrews Air Force Base, Md.

The 75th Ranger Regiment—the world's finest special operations light infantry force—continues to make critical contributions to the fight against terrorism. For nearly eight years, one or more of the Ranger battalions has been deployed supporting operations in either Afghanistan or Iraq. Simultaneously, the 75th completed the first major change to the Rangers' force design since 1984, adding a fourth line company to each infantry battalion as well as a special troops battalion. The addition of these soldiers makes the regiment more operationally flexible to support OIF, OEF and international commitments.

Another key element in the growth of USASOC has been a major expansion in the 95th Civil Affairs Brigade, with the forming of two new civil affairs battalions, the 91st and 98th. With demands for CA forces at an all-time high, however, the men and women of the new battalions were already participating in OIF and operations in Africa at the time of their activation.



Special Operations Command Korea (SOCKOR) troops prepare for airborne jumps with a helium blimp and gondola at the Republic of Korea Drop Zone. The jump was an opportunity for SOCKOR augmentees assigned or attached during Exercise Key Resolve 09 to jump with active SOCKOR members.



Special Operations Task Force-Central soldiers, a team headed by CPT Michael Zdrojesky (second from left), sprint in full combat gear during a Special Forces challenge on a military base in Baghdad.

Reflecting that commitment, over the past year, 95th CA Brigade NCOs have been awarded two Silver Stars and numerous Bronze Stars for valor and performance.

The 4th Psychological Operations Group (POG) remains the active Army's only psychological operations unit. The 1,300-member unit is also slated to grow to approximately 2,300 troops by 2011. The ranks of the 4th POG include regional experts and linguists who understand political, cultural, ethnic and religious subtleties. With functional experts in all aspects of tactical communications, the 4th POG offers joint force commanders unmatched abilities to influence target audiences as well as support U.S. diplomacy.

This year saw the Special Operations Support Brigade reflagged as the 528th Special Operations Sustainment Brigade. The 528th is a critical enabler to USASOC missions, providing added staying power for missions worldwide. Beyond the ability to ensure support to our men and women frequently operating in some of the world's most remote areas and to provide sophisticated, interoperable strategic communications, the 528th has the Army's only air transport medical team designed to provide critical care aboard fixed-wing aircraft.

The performance and contributions of Army special operations forces in the Central Command theater of operations and around the world have been nothing short of magnificent. Whether in the combat theaters, the Philippines, Trans-Saharan Africa, or wherever friends and partners find themselves challenged by the forces of disintegration, oppression and extremism, Army special operators from across the command's formations are unquestionably among America's most relevant answer to the threats we face. Regardless of where along the range of capabilities one points, be it the ability to execute the most lethal, highly complex and sensitive special operations, wage unconventional warfare, conduct special operations rotary-wing operations, or prosecute civil-military and influence operations and tailored sustainment to it all, the world standard is found within our Army's special operations force. We are honored to play our role within the finest, most capable Army and joint special operations force ever to serve our great country. ★

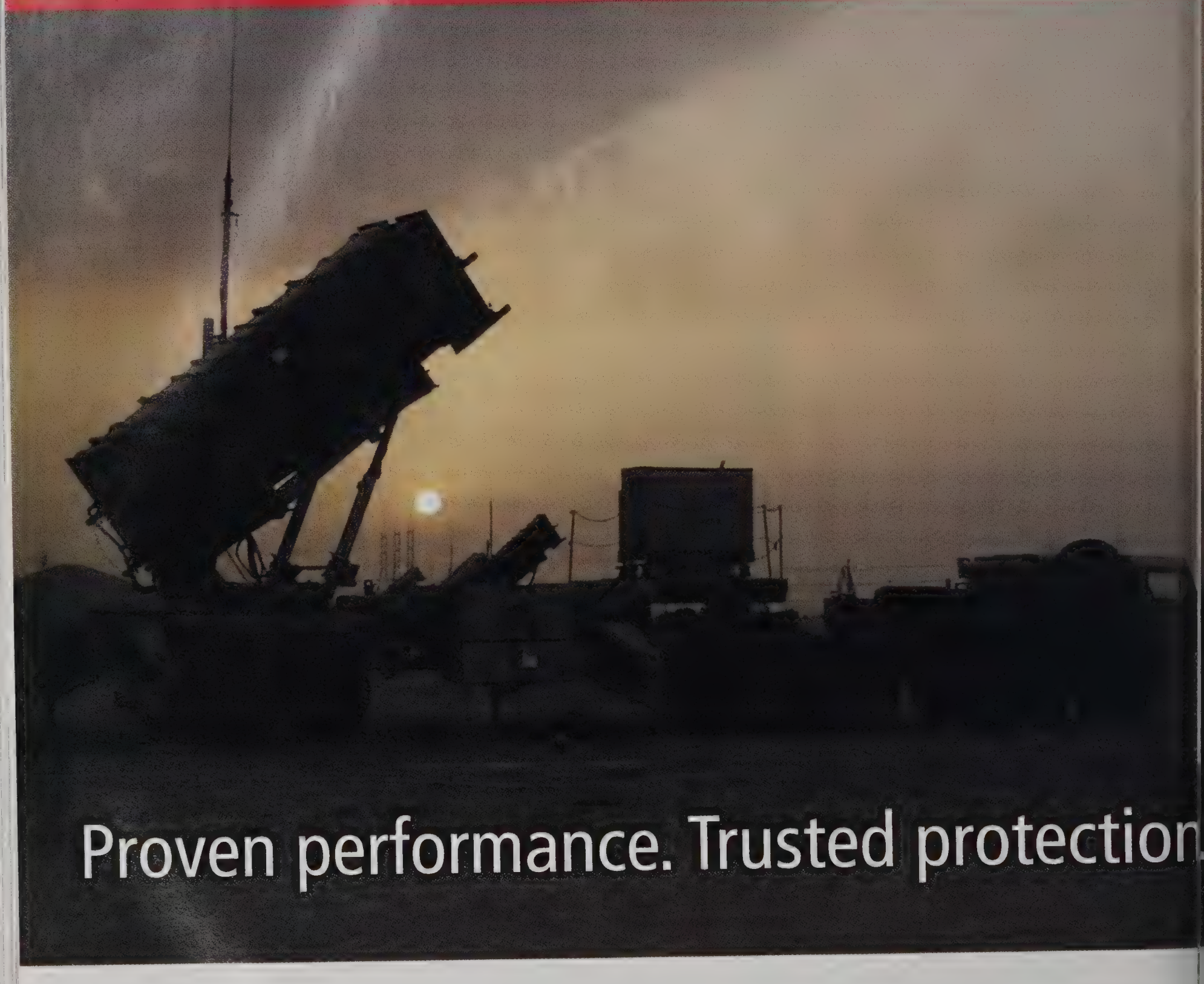


A special operations force soldier assigned to the Combined Joint Special Operations Task Force-Afghanistan fires on a Taliban fighting position during a battle in the Sangin District of Helmand Province.


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Space & Missile Defense: Supporting the Warfighter

By LTG Kevin T. Campbell
Commanding General,
U.S. Army Space and Missile
Defense Command/
U.S. Army Forces Strategic Command

U.S. Army Space and Missile Defense Command/ Army Forces Strategic Command (USASMDC/ ARSTRAT) remains focused on supporting our warfighters with advanced space, missile defense and cyber capabilities. As the Army service component command (ASCC) to U.S. Strategic Command (USSTRATCOM), we ensure that combatant commanders have access to our enabling capabilities that provide the tactical warfighter with an advantage.

Providing those capabilities requires a "team of teams" focused on giving the warfighter, our primary customer, the absolute best. In our role as the ASCC to U.S. Strategic Command, we provide planning, integration, control, and coordination of Army forces and capabilities in support of





Army Space Support Team 3 soldiers assemble radar necessary for a training exercise. The exercise, through a commercial produced by Accessions Command, was designed to raise awareness of U.S. Army Space and Missile Command/Army Forces Strategic Command (USASMDC/ARSTRAT).

assigned USSTRATCOM missions. Our team consists of soldiers, civilians and contractors, as well as partners in industry and academia. Any success we achieve in supporting the warfighter is a direct result of the dedication of these many good people.

Our Team

The soldiers on our team are predominantly located within two brigades: the 1st Space Brigade and the 100th Missile Defense Brigade (Ground-based Midcourse Defense [GMD]), both headquartered in Colorado Springs, Colo.

The 1st Space Brigade has forces assigned worldwide conducting continuous, global space-force enhancement in support of combatant commanders' operations. The soldiers of the brigade are deployed globally, providing space-based communications, intelligence and planning support to the warfighter. The 1st Space Battalion focuses on ballistic missile early warning, Army space support teams and commercial exploitation teams (CETs).

During a recent deployment, our CETs trained members of the Afghan National Army on the FalconLite compact computer program. This software provides the means to quickly exploit commercial imagery, plan operations and share information from the strategic to the tactical levels. The CET also mentored the Afghan national forces in a national-level exercise to improve the integration of commercial imagery into their combat operations.

The 117th Space Battalion (Colorado Army National Guard) mirrors the support provided by the 1st Space Battalion and has played a key role in providing continuous space support in the U.S. Central Command area of operations. The 53rd Signal Battalion controls and manages the payload on the wideband global satellite (WGS) communications and the defense satellite communications system. Last year, the second WGS was launched and will become operational this year. WGS provides greater bandwidth to the combatant commanders and enables us to reduce our dependency on commercial satellite communications.

The 100th Missile Defense Brigade (GMD) provides the nation with a defense against intercontinental ballistic missile attack. The command is located in Colorado Springs with a detachment at Vandenberg Air Force Base (AFB), Calif., and the 49th Missile Defense Battalion located at Fort Greely, Alaska. Soldiers from the active component and members of the National Guard from Colorado, Alaska and



LTG Kevin T. Campbell *is the commanding general of the U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command. He also commands the Joint functional component command for Integrated Missile Defense. He previously served as chief of staff, U.S. Strategic Command; director of Plans, U.S. Space Command; deputy commanding general, U.S. Army Air Defense Artillery Center and Fort Bliss, Texas; and commanding general, 32nd Army Air and Missile Command, Fort Bliss. LTG Campbell holds a master's degree in personnel management and administration from the University of New Hampshire and a master's degree in national security.*

California operate the GMD systems at Fort Greely, Vandenberg AFB and Schriever AFB, Colo. In April 2009, the brigade assumed a high-readiness posture as North Korea launched a second Taepodong-2, reportedly an attempted space launch.

The 100th Missile Defense Brigade and the 49th Missile Defense Battalion also form the critical test base for the Missile Defense Agency's spiral development process for the ground-based midcourse missile defense system. The battalion's fire-direction crew participated in a successful flight and intercept test in December 2008. The soldiers of the 100th and its subordinate units provide unique operational and testing capabilities and are prepared to defend the United States against ballistic missile attack around the clock.

In the Year of the Noncommissioned Officer, it is important to emphasize that our NCOs work with leading-edge technology and are at the forefront of what's new within the technical and scientific realms. We rely heavily upon our NCOs as members of deployed Army space support teams and commercial exploitation teams and to crew the joint tactical ground station shelters that provide early warning of a ballistic missile attack to forward-deployed forces, wideband satellite operations centers and missile defense fire-direction centers. Our NCOs ensure that each soldier is uniquely trained and certified, and they contribute significantly to the supported unit's mission. Our nation's ability to have dominant space and missile defense capabilities is not possible without our NCOs.

Civilian Workforce

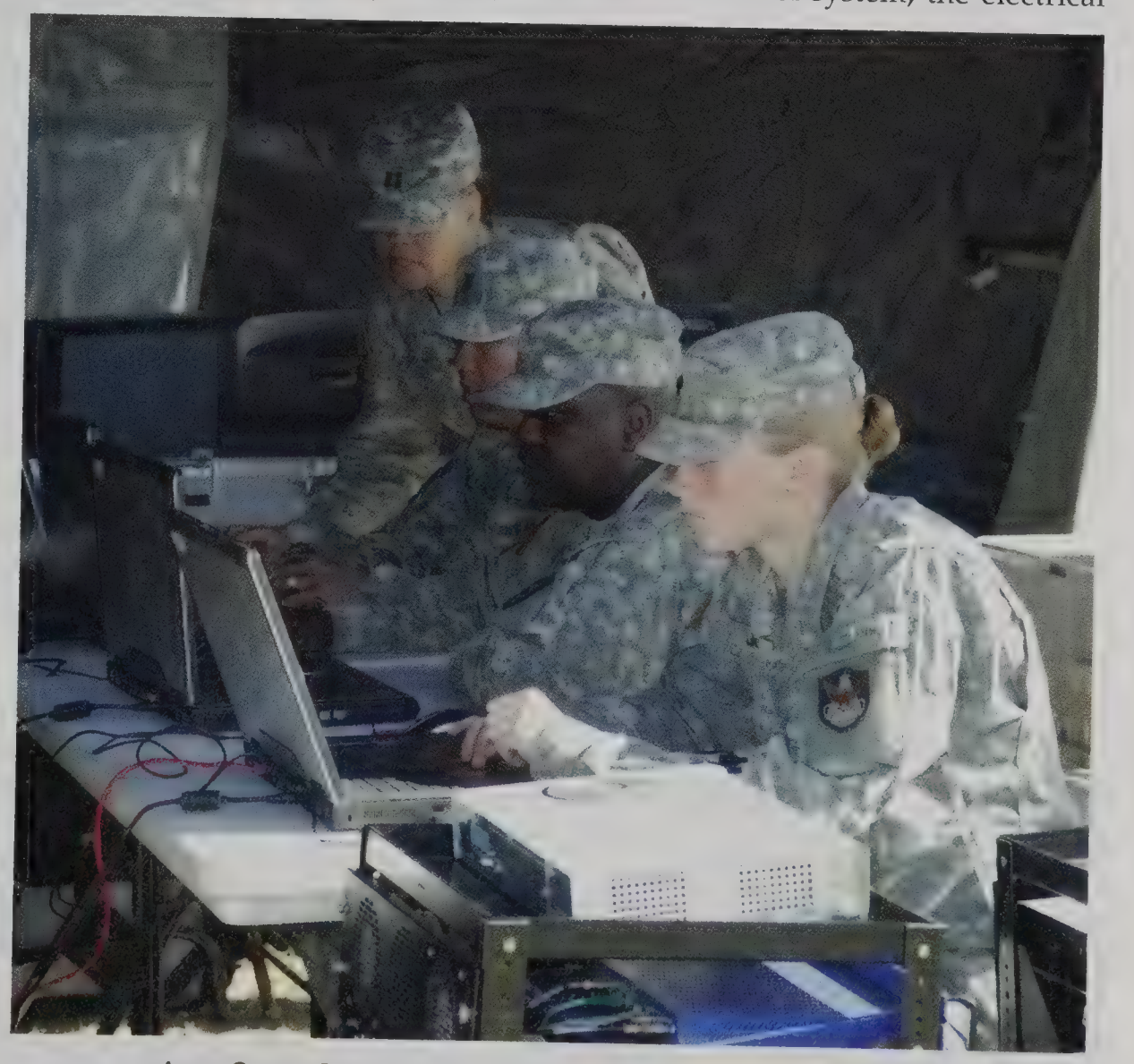
Our civilian workforce, much like our soldiers, is located around the globe, from the U.S. Army Kwajalein Atoll in the Pacific to Colorado Springs, to Huntsville, Ala., and across Europe. The civilian workforce is focused on researching, developing and acquiring the technologies necessary for maintaining our edge in space and missile defense and is predominantly assigned to three USASMDC/ARSTRAT organizations: the Technical Center, the Technical Interoperability and Matrix Center, and the Contracting and Acquisition Management Office. A portion of our civilian workforce, along with soldiers, is also assigned to the Future Warfare Center (FWC). The FWC is the Army integrator for the doctrine, organization, training, materiel, leadership, personnel and facilities that support space, missile defense and high-altitude systems.

Our civilian workforce is the center of gravity in providing advanced space and missile defense capabilities that allow USASMDC/ARSTRAT to support the warfighter. The following accomplishments are a direct result of our superb civilian workforce working with our partners in industry and academia.

SMDC-ONE (Orbital Nanosatellite Effects). In April, we took delivery of eight nanosatellites. It's been almost 50 years since the Army last developed a satellite—Courier 1B was launched into space in October 1960. Our scientists and engineers have been hard at work with our industry partners developing a satellite-based beyond-line-of-sight communications and data exfiltration capability.

In April 2008, USASMDC/ARSTRAT and our industry partners set a goal to develop, build and qualify for launch eight nanosatellite space vehicles within nine to 12 months. We executed this program to demonstrate that it is possible to rapidly design and build low-cost nanosatellites. The first of the SMDC-ONE nanosatellites is scheduled to be launched later this year, with others to follow in 2010.

Joint High-Power Solid-State Laser (JHPSSL). A milestone was reached in January 2009 when a solid-state laser (SSL) reached 100 kilowatt power for the first time. This milestone represents the culmination of three years of hard work by the joint high-power solid-state laser team to advance SSL technology to a level with clear military utility. The high-energy laser technology demonstrator (HELTD) program will use technologies developed under the JHPSSL program to demonstrate a high-powered laser in a relative operational environment with the ability to engage rockets, artillery and mortars. HELTD's final product will integrate key system components (SSL, the beam control system, the electrical



Army Space Support Team 3, part of the 1st Space Battalion, 1st Space Brigade, trains on its critical space support mission.



Crew members from the 100th Missile Defense Brigade train continuously on systems designed to defend the United States from intercontinental ballistic missiles.

power and the thermal management subsystems) on a tactical wheeled vehicle capable of limited deployment.

Weapon Watch. USASMDC/ARSTRAT was able to deploy a new capability into theater this past year that provides the warfighter with precise actionable information on hostile weapons fire in complex urban terrain in real time. Weapon Watch operates by detecting the weapons' infrared fire signature to identify and locate, in real time, small arms, rocket-propelled grenades and mortars. The system provides visual confirmation of hostile intent and allows for real-time counteraction. More than 10 systems have deployed into theater on various platforms and at various locations.

This capability can be used in urban and complex terrain, for security operations, force protection and military police missions. Weapon Watch provides a combat multiplier to our warfighters, and we anticipate additional systems will be deployed into theater this coming year. These are but a few of the accomplishments made possible through the hard work of our soldiers, civilian workforce, contractors and partners in industry and academia.

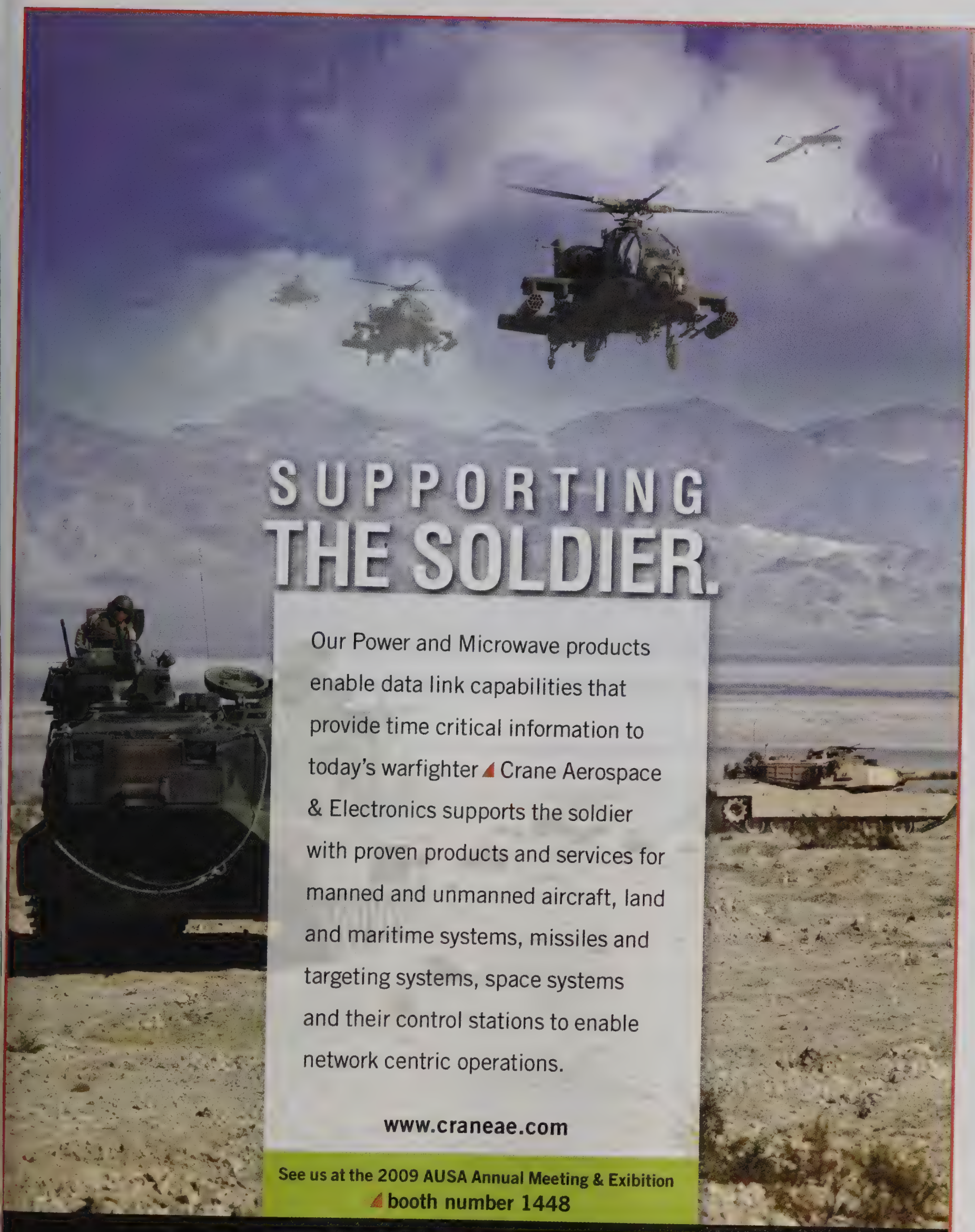
Goals

Our goals for 2010 remain focused on providing warfighters with advanced space, missile defense and cyber capabilities. Our goals are not all-inclusive; they represent a snapshot of where our team of teams will be focusing their efforts in the coming year.

One of our key goals in the next year will be to clarify our Army service component command roles and responsibilities (Title 10 and operational) for the emerging and increasingly important cyber mission area. As Gen Kevin Chilton, commander, U.S. Strategic Command, stated to the House Armed Services Committee in March: "Addressing the cyber threat is no small challenge and demands a new mindset as we refine the culture in which we understand our responsibilities and grow our cyber expertise, shape the conduct we follow to organize and orient against threats and improve the technical and manpower capabilities." This is an area that is gaining in importance both militarily and nationally, and USASMDC/ARSTRAT will work to "maintain our freedom of action in this domain," as Gen Chilton states.

Another goal is for USASMDC/ARSTRAT to become fully engaged in the capabilities needs analysis process conducted by U.S. Army Training and Doctrine Command's Army Capabilities Integration Center (ARCIC). This effort helps shape our wargaming, experimentation and capabilities developments toward the identified and prioritized Army capability gaps. We also support the production of the ARCIC campaign plan in order to synchronize and integrate our efforts with the rest of the capabilities-development community.

USASMDC/ARSTRAT also plans to redistribute the operations from U.S. Army Kwajalein Atoll/Reagan Test Site to Redstone Arsenal, Ala.; this will enhance customer support in the continental United States and reduce the per


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Soldiers from the 49th Missile Defense Battalion in Fort Greely, Alaska, pinpoint positions on a map of the surrounding post.

sonnel footprint at Kwajalein Atoll. An undersea fiber-optic cable system between Kwajalein and Guam will enable primary command and control for missile test and space operations from Huntsville. We believe that the distributed operations will enable easier sharing of data with our customers and other test ranges.

Lastly, we plan to create a civilian space career program. There are three ongoing initiatives in civilian space cadre development: identifying additional space cadre billets and space cadre members; instituting a DoD-wide civilian coding system; and providing training opportunities to cadre members. These initiatives all contribute to the long-term goal of developing a civilian space career program for the Army.

The accomplishments and successes we enjoy are possible because of our soldiers, our civilian workforce and our partners. Critical to mission success is our work with allies and friends. There are challenges ahead as we continue to operate in an era of persistent conflict. USASMDC/ARSTRAT will be challenged asymmetrically by hybrid threats, but we will meet the challenge and remain committed to providing the warfighter with advanced space and missile defense capabilities and technologies. We look forward to meeting the challenges of the coming year.

Secure the high ground! ★



SSG Jeffery Burke, a member of USASMDC/ARSTRAT's Commercial Exploitation Team, trains members of the Afghanistan National Army on management of intelligence information.

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U.S. Army Corps of Engineers 'Building Strong'

By LTG Robert L. Van Antwerp Jr.
Chief of Engineers
and
Commanding General,
U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers' (USACE) new slogan, "Building Strong," is at the heart of our work on behalf of the nation. We are in the midst of carrying out a mission of unprecedented scope, and we are committed to building strong throughout this enormous challenge. Our highlights this year include: our progress in contingency operations, both foreign and domestic; some of our remarkable contributions to the warfighter through the latest research and development; the tremendous workload challenges we face; and a tribute to our noncommissioned officers in this Year of the NCO.



In the last year, the Corps of Engineers has seen extensive change, especially in our overseas contingency operations in Iraq and Afghanistan. The dramatically improved security situation



Personnel from the U.S. Army Corps of Engineers check the progress of a hospital under construction near Musayib, Iraq.

in Iraq has cleared the way for us to make remarkable and essential improvements in the infrastructure there. In January, our Gulf Region Division marked five years of progress in Iraq. The hardworking servicemembers, civilians, contractors and Iraqi associates have completed more than 4,500 projects that provide the most basic and essential services—clean water, electricity, health-care facilities and schools—to the people of Iraq.

Our footprint in Iraq is changing significantly. This summer, we moved our headquarters out of the International Zone in Baghdad to Victory Base Complex, just outside the city. This move supports the U.S.-Iraq Security Agreement each nation signed at the end of 2008, stipulating the details of our continued role there. We also are in the process of transforming our three districts into one enduring Gulf Region District. As the Gulf Region Division executes our responsible drawdown, we remain committed to assisting the Iraqi government in assuming full responsibility for the construction and management of its national infrastructure.

In Afghanistan, the workload is heating up. The Afghanistan Engineer District (AED) is poised to support the construction mission and growth of the Afghan and Coalition forces in Afghanistan.

AED's workload has increased by more than $1 billion in the last year; we expect to increase by another $2 billion or more in fiscal year (FY) 2010. We are gearing up for more than $2.7 billion in projects this year and $3.6 billion next year. Most of our work involves building facilities for the Afghan national security forces, but in September 2008, we created a water and infrastructure branch at AED to help bring the Corps of Engineers' expertise on water to Afghanistan.

We are especially proud of our Afghan First initiative, which awarded more than 70 percent of our contracts to Afghan construction firms. AED employs nearly 20,000 Afghans during peak construction season, making us one of the largest employers in the country.

To accommodate the massive construction surge, a second district, AED South, is being created. Our staff is expected to almost double this year (from 300 people in May 2008 to nearly 600 at the end of 2009).

We've also been very busy this year developing the most effective, efficient structure for Readiness XXI, our emergency management and disaster response program. Transforming from good to great in this area involves integrating elements of the Military Programs G-3 and the Civil Works Homeland Security Office into a single organization, responsible for responding to both domestic disaster and military contingencies. The first step—a very significant one—was the establishment of the provisional Contingency Operations Directorate at USACE headquarters.

There are many other unique activities in which USACE is proud to be involved. In May, King Abdullah II of Jordan inaugurated the King Abdullah II Special Operations Training Center (KASOTC) outside Amman, Jordan. KASOTC is a state-of-the-art training center for special operations and security forces from Jordan, the United States and regional allies. It will provide best practices in counterterrorism training. Design and construction of the facility was managed by our Transatlantic Programs Center, working in conjunctio



LTG Robert L. Van Antwerp Jr. *became the U.S. Army Chief of Engineers and commanding general of the U.S Army Corps of Engineers (USACE) in May 2007. LTG Van Antwerp serves as the senior military officer overseeing most of the nation's civil-works infrastructure and military construction. He took command of USACE after serving most recently as commanding general, U.S. Army Accessions Command, where he was responsible for recruiting and training thousands of soldiers. Other command assignments include the U.S. Army Maneuver Support Center and Fort Leonard Wood, Mo.; commandant, U.S. Army Engineer School; U.S. Army Corps of Engineers, Los Angeles District (during the Northridge Earthquake of 1994); the U.S. Army Division, South Atlantic, Atlanta, Ga.; and the 326th Engineer Battalion, 101st Airborne Division (Air Assault), during Operations Desert Shield and Desert Storm in Saudi Arabia and Iraq. A graduate of the U.S. Military Academy, LTG Van Antwerp completed Ranger, Airborne and Air Assault training, and both the Engineer Officer Basic and Advanced Courses. He also attended the Army Command and General Staff College and the Army War College. He holds a master's degree in mechanical engineering from the University of Michigan and an MBA from Long Island University. He is a registered professional engineer.*



Army Corps of Engineers civil engineer Teresa Morales discusses the progress of a micro hydroelectric project with Afghan elders. The plant is intended to provide much-needed electricity to a remote village in Panjshir Province, Afghanistan.

ith the King Abdullah II Design and Development Bu-au, an agency of the Jordanian Ministry of Defense.

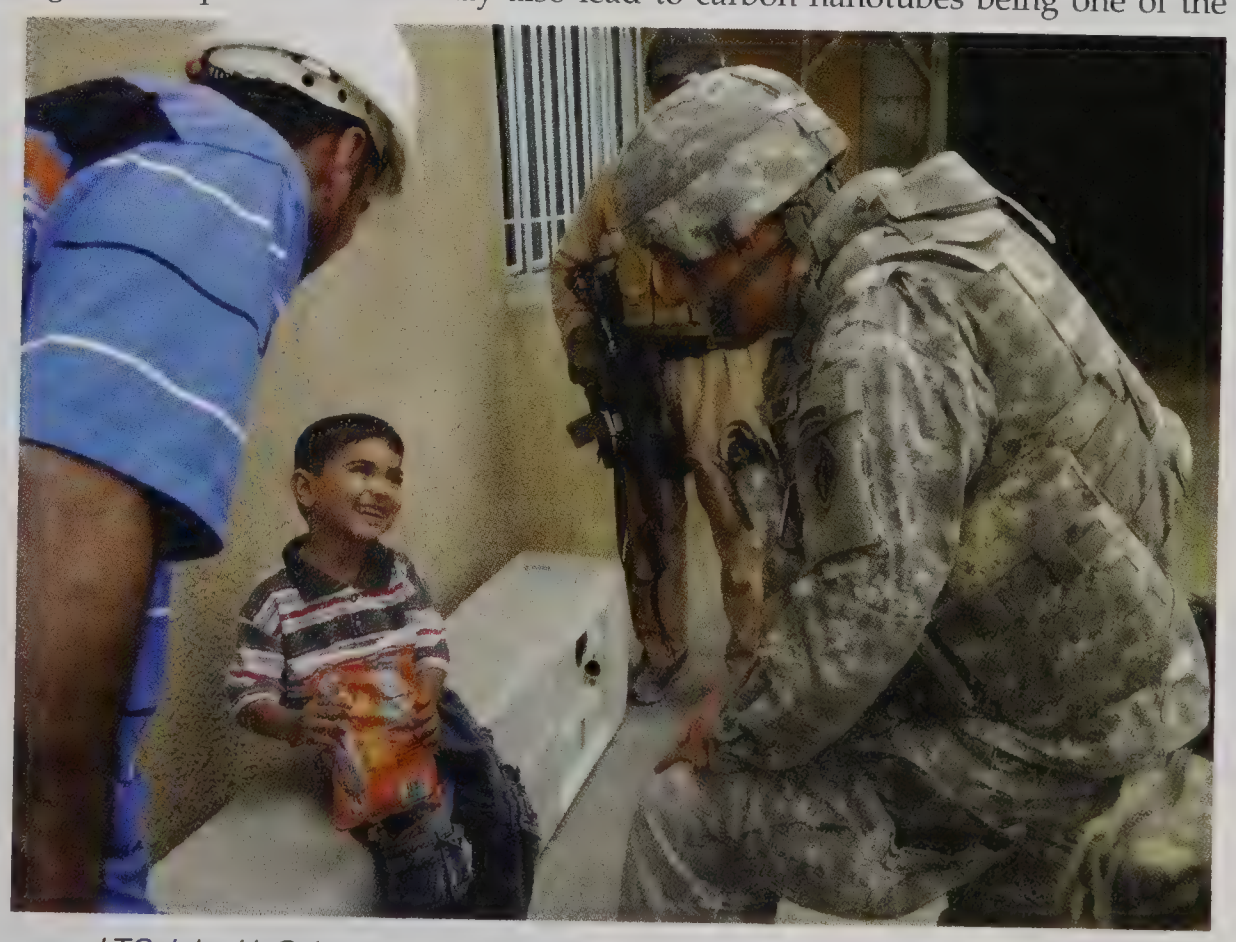
Meanwhile, cutting-edge USACE technology is helping ve lives in Iraq and Afghanistan. Our base camps in Iraq ere inviting targets for insurgent mortar and rocket at-cks. Thanks to our fast-paced efforts to provide overhead otection, however, base camps are no longer the "soft" rgets they once were.

Our Engineer Research and Development Center (ERDC) uickly developed and successfully tested effective over-ead-cover protection designs, and the Army Central Com-and secured funding to provide retrofitted overhead-cover otection for key military facilities throughout Iraq. This oject was managed by the Corps' ansatlantic Programs Center; the con-uction work was managed by the stricts of the Corps' Gulf Region Divi-n in Iraq. The overhead coverage stem was subsequently expanded to clude facilities for the Department of te. Ultimately, more than 100 struc-es (2 million square feet of overhead ver protection) were built at 22 loca-ns in Iraq to protect U.S. military and vernment personnel. The structures ve sustained direct hits in some loca-ns and have done their job protect-; the lives of people inside.

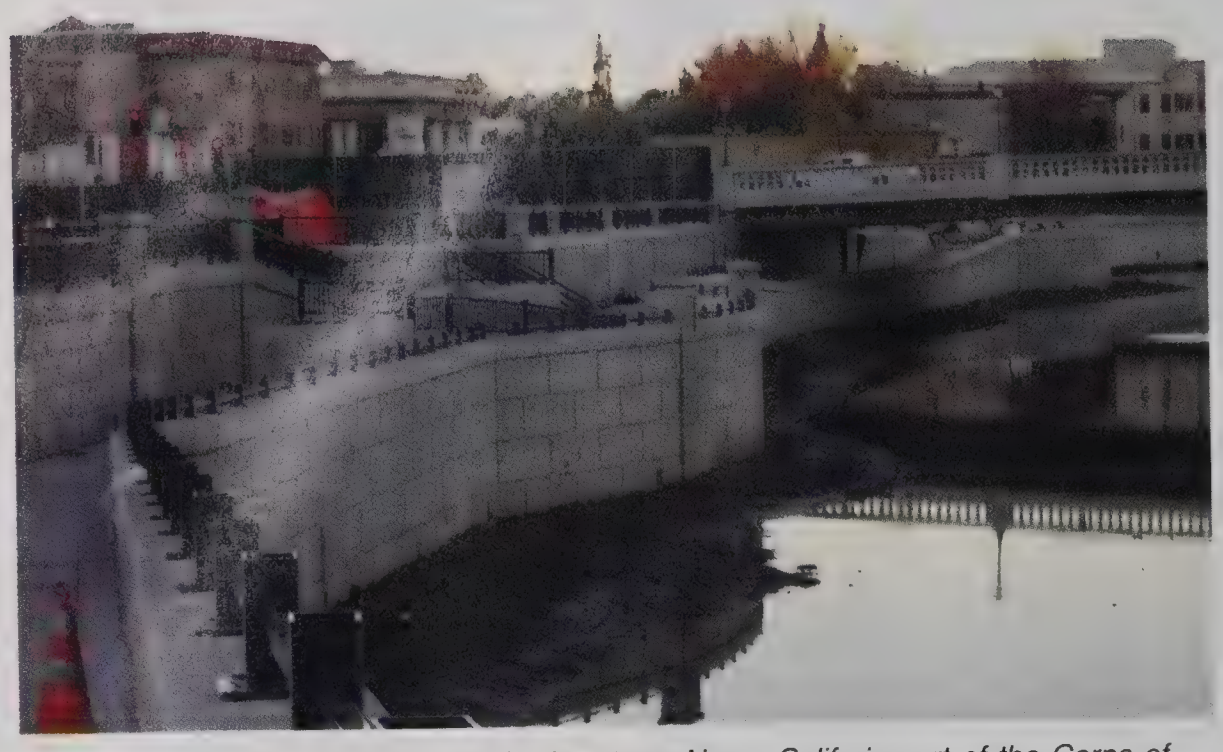
Another example of ERDC's ground-aking work is the mobile modular otective system. First fielded in early 08, the system's expandable metal me holds ERDC-developed high-ngth concrete panels that have the listic performance of ceramic ar-rs. This lightweight system's com-ents are all manportable, and four soldiers can assemble an 8-foot by 10-foot section in about 15 minutes without special tools. It currently provides our forces in Iraq with protection from bomb blasts, small-arms fire and rocket-propelled grenades.

In urban areas of Iraq, soldiers typically make their barracks and headquarters in existing permanent structures—masonry buildings easily destroyed by a vehicle bomb blast. ERDC researchers have developed an elastomeric material called the X-FLEX Blast Protection System that soldiers can stick on walls like wallpaper, so it is easily applied without special tools or training. This material reduces blast effects by a factor of 15 and greatly reduces fragmentation from brick walls.

Current ERDC research may affect all of our lives. Carbon nanotubes, made of a new supermaterial that is lighter and much stronger than Kevlar, are under development. With a strength-to-weight ratio 750 times that of high-strength steel, carbon nanotubes have great promise for many future applications. This ERDC-led research may eventually provide stronger and lighter aircraft, vehicles, body armor and other military products. As with many military technologies, this work may also lead to carbon nanotubes being one of the



LTC John H. Osborn, assigned to the Corps of Engineers, gives candy to an Iraqi boy before checking the progress of a water treatment plant near Musayib, Iraq, that will supply potable water to thousands of Iraqi citizens.



The rehabilitated Veterans Park in downtown Napa, Calif., is part of the Corps of Engineers Sacramento District's Napa Flood Protection Project, which won the 2009 Public Works Project of the Year from the American Public Works Association.

major construction materials in the future for our nation's buildings, bridges and cars.

In terms of military construction, we continue working our way through the largest military construction workload since World War II, which, from FY 2006 through FY 2013, exceeds $72.1 billion. This unprecedented program is largely driven by Base Realignment and Closure, Army growth, and the change in the Army's structure and global footprint.

The American Recovery and Reinvestment Act (ARRA) of 2009, signed by President Obama in February, is adding to our already unprecedented workload with $4.6 billion in civil works, $3.5 billion in military construction and $1 billion in interagency and international services work.

Servicemembers and their families will reap the benefits of ARRA funding. For example, by the end of FY 2010, USACE will have built more than a dozen child-care centers, a hospital, two Warrior in Transition projects, Air Force dormitories, and many Army and Air Force family housing projects. ARRA also provides $555 million to give partial financial relief to relocating servicemember and civilian homeowners affected by the Base Realignment and Closure Act through the Army's Homeowner Assistance Program.

I feel honored—and humbled—to be leading an organization with such an integral role in our nation's economic recovery. Economists estimate that recovery act civil works projects alone will create or maintain approximately 57,400 direct construction industry jobs and an additional 64,000 indirect jobs.

With this unprecedented workload, we are relying more than ever on our noncommissioned officers. As the Army celebrates the Year of the Noncommissioned Officer, our NCOs are increasing in both numbers and significance. Traditionally the majority of the uniformed personnel associated with the Corps are engineer officers. But with the addition of the Gulf Region Division, Afghanistan Engineer District and the Forward Engineer Support Teams to the structure of the Corps, the number of senior noncommissioned officers has grown to more than 200.

What they're bringing to the table is threefold: experience, leadership and education. They've gained experience from assignments to troop units and multiple deployments, as well as from working side by side with our sister services and civilian contractors; leadership, the most important skill set of our NCOs, has often been honed through years of tough, demanding assignments; and they bring education through their years in the Noncommissioned Officer Education System and the increase in the number of NCOs earning bachelor's and master's degrees. Many NCOs are performing tasks today that, in the past, were expected only of our officers, and they are rising to the occasion, making us a stronger regiment in the process.

It always boils down to our people—our dedicated servicemembers, civilians and contractors, who selflessly serve this great nation and are essential to helping us meet an unprecedented demand on time and on budget. ★



U.S. Army Corps of Engineers project engineer Simeon Francis examines filter activators as they are being cleaned at a water treatment plant in Baghdad.



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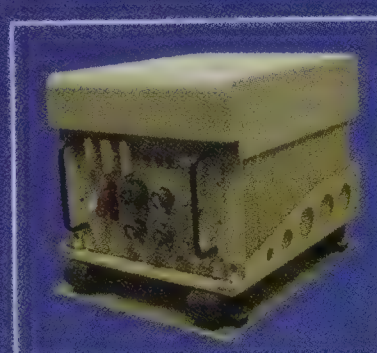
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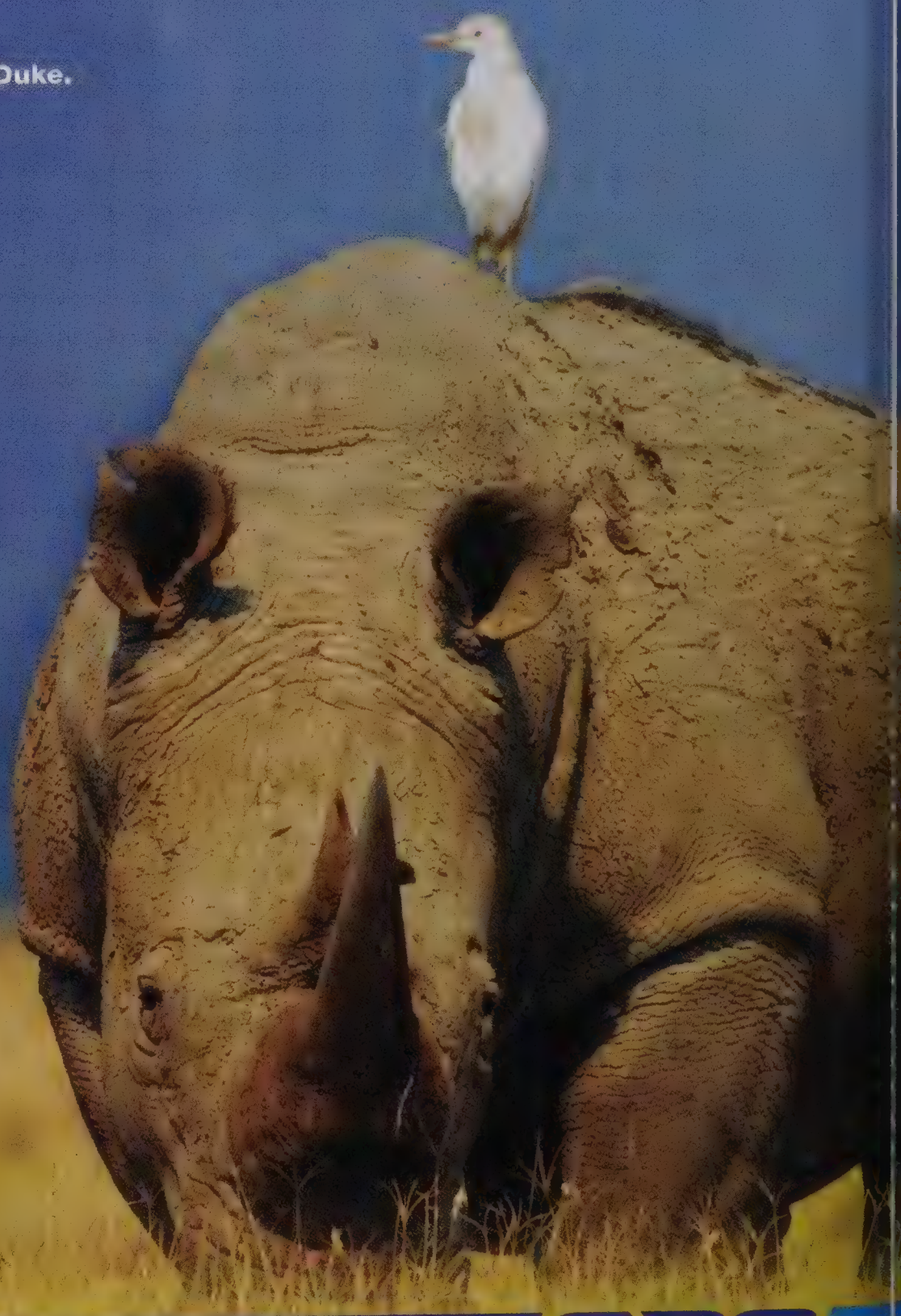
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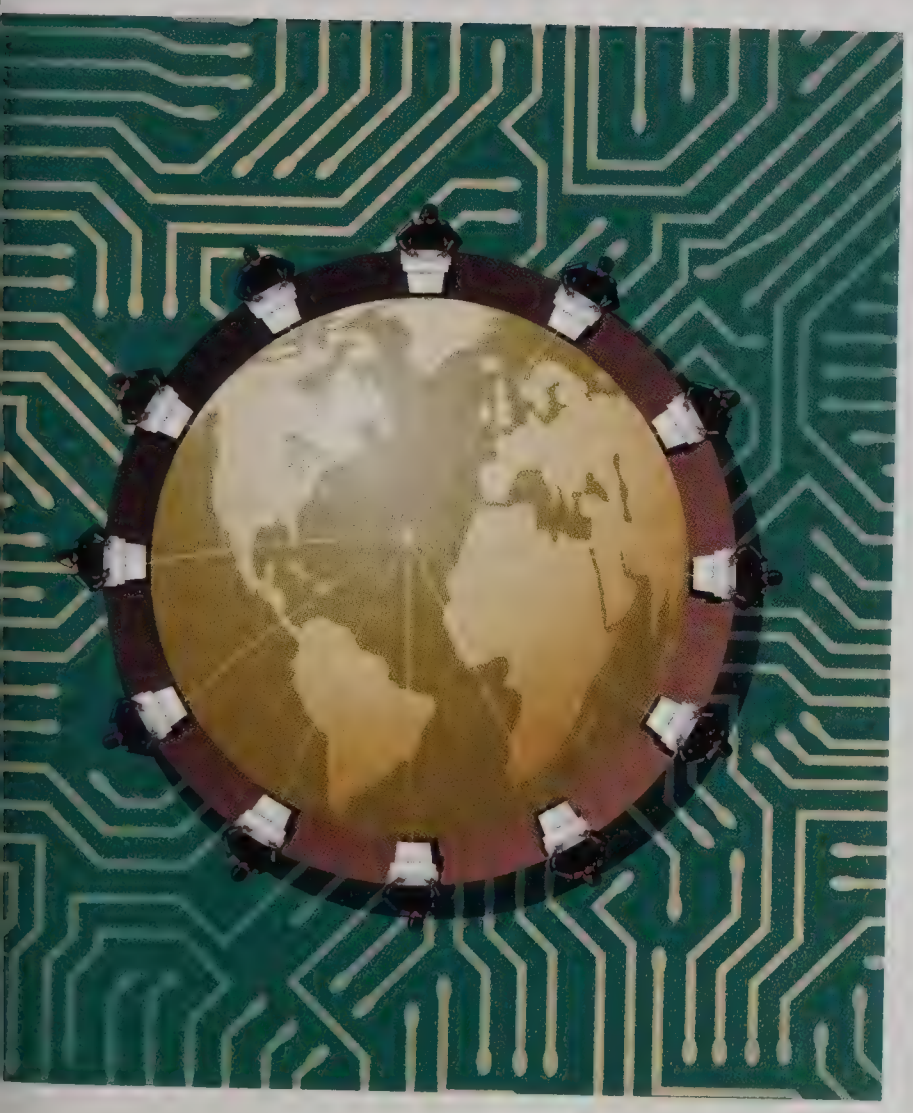
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Institutional Adaptation: Generating the 21st-Century Army

By LTG Robert Durbin
Director, Army Enterprise Task Force

During my 19 months in Afghanistan, every night before going to sleep I would turn on my Tandberg video teleconference machine and speak with my fellow two-star commanders about our requirements. Our standard practice was to use only as many resources on a particular task as was absolutely necessary because whatever was used that day would not be available the next day. We regularly anticipated each other's needs and shifted resources where they were needed before we were asked. It was the model of collaboration.



When I returned to command of the 1st Infantry Division, however, I fell back into my old ways, back into the mind-set fostered over my entire Army career: "What's mine is mine, and whatever I can get from another installation is mine, too."

Such thinking no longer serves the best interest of our Army, our nation or our soldiers. We must change our culture to reflect the requirement-for-resource informed decision making and adopt an enterprise approach to our business practices.

To address this, the Army chartered the Enterprise Task Force (ETF) in August 2008 to "enable the generating force to be more responsive to the operational Army in an era of persistent conflict and fiscal uncertainty."

After more than seven years at war, the Army is out of balance, and its institutional support systems—designed for pre-9/11 conditions—are strained. Soldiers and their families bear much of the brunt of this imbalance, as evidenced by unsustainable boots-on-the-ground-to-dwell ratios, dependence on stop-loss, and increased incidents of suicide, substance abuse and divorce.

Given the volatility, uncertainty and complexity of current and future strategic demands, the Chief of Staff of the Army (CSA) has identified versatility as the key to a balanced Army.

Versatility acknowledges the difficulty in predicting the exact nature of future challenges, but also recognizes that the Army must be able to react to unanticipated challenges. A versatile force must possess a balanced mix of multipurpose capabilities and sufficient capacity to accomplish a broad range of tasks across the full spectrum of military operations—from peacetime engagement to major combat operations.

Versatility is central to the Army's ongoing efforts to transform its operational force into a campaign-quality expeditionary force, but the generating force has not seen the same transformation. The Army has trained 21st-century soldiers on 21st-century equipment and organized them into 21st-century formations, but has continued to support them with Cold War-legacy institutions inadequate for the task. The nation is engaged in the longest conflict fought exclusively with an all-volunteer force, but the processes and procedures that are supposed to keep the Army running were never designed to support such a force.

The ETF is now making strides to change that. The term for this next phase of transformation is *institutional adaptation*—changing the business side of the Army to optimize the Army force generation (ARFORGEN) process to best generate trained and ready forces for combatant commanders.

A subcomponent of the CSA's imperative to transform, institutional adaptation acknowledges the complexity of modern warfare and the tasks required to support the operating forces. It takes a holistic view of leadership, problem-solving and decision-making mechanisms and seeks to align processes, procedures and organizations to maximize efficiency and effectiveness across the entire Army enterprise.

The goals of institutional adaptation are to improve ARFORGEN, adopt an enterprise approach to Army strategic decision making, and reform the Army's requirements and resource processes. By organizing the Army's work around these three goals, institutional adaptation will enhance the Army's versatility in response to a complex and dynamic strategic environment.

Institutional adaptation is not a change to structure or authorities, but rather an effort to increase collaboration, improve synchronization and enable integration across the entire force. At its core is a culture change—a fundamental shift in the way the Army thinks about readiness. This shift is embodied in the Army's transformation from a division-based, tiered-readiness model to a brigade-based, rotational-readiness model with sufficient versatility to conduct full spectrum operations without overburdening our most valuable resource, our soldiers.

Transforming the generating force requires an enterprise approach that aligns functions and fiscal authorities but also acknowledges the complex relationships between those functions. Across the Army enterprise, from recruiting and training to equipping and deploying, decisions do not take place in a vacuum. Actions in one area have dramatic effects on other areas. The enterprise approach simply acknowledges these relationships and seeks to view the entire organization from 30,000 feet, where these relationships are visible.

To focus transformation efforts, the Army has defined four core enterprises (CE) of the generating force: materiel, human capital, readiness, and services and infrastructure. Each CE addresses initiatives specific to its mission, and activities are coordinated through a synchronization board. This enterprise approach provides senior leaders with the situational awareness required to make informed and nuanced decisions.

Institutional Adaptation Progress

In January, the Secretary of the Army signed a memorandum formally establishing institutional adaptation as a component of Army transformation and establishing the Army Enterprise Board (AEB) with representation from the Army Secretariat; Headquarters, Department of the Army (HQDA) staff; and Army commanders. The AEB serves as the central forum for routine collaboration on strategic Army issues.

The Army also approved the institutional adaptation governance model, which empowers Army senior leaders by facilitating the establishment of new, better-informed forums, decentralizing execution activities, and realigning activities among HQDA and the core enterprises.



LTG Robert Durbin *assumed duties as the special assistant to the Chief of Staff of the Army for Enterprise Management in July 2008. LTG Durbin previously served as the commanding general of the 1st Infantry Division and Fort Riley, Kan. During Operation Enduring Freedom, he commanded the Combined Security Transition Command-Afghanistan, Combined Forces Command-Afghanistan for 19 months. Other command assignments include commander, 1st Battalion, 67th Armor, 2nd Armored Division, Fort Hood, Texas; commander, 1st Brigade, 1st Infantry Division (Mechanized), Fort Riley; and assistant division commander (Support), 1st Cavalry Division, Fort Hood. A graduate of the U.S. Military Academy, LTG Durbin holds a master's degree in mechanical engineering from Pennsylvania State University and is a graduate of the U.S. Army Command and General Staff College as well as of the Senior Service College, through the Massachusetts Institute of Technology.*

In response to guidance from Army senior leaders, the generating force's four CEs are aligned around the inputs to the ARFORGEN process. Each CE is supported by an enterprise process improvement team to align resources and enable efficient and effective execution in support of ARFORGEN optimization.

Readiness Core Enterprise. The Under Secretary of the Army and the U.S. Army Forces Command commander lead the Readiness Core Enterprise (RCE), which focuses primarily on improving the delivery of trained and ready units and forces in support of combatant commanders and Army service requirements. The RCE executes the rotational readiness process, ensures unit readiness, and manages unit-specific training and the training support life cycle.

In June, the RCE executed the reset rehearsal-of-concept (ROC) drill. The purpose of reset is to establish a balanced process following an extended deployment that systematically restores and replenishes redeployed units' personnel and equipment readiness to permit the resumption of training for future missions. The reset model accelerates reconstitution of the force, increases unit readiness and improves preparation for deployment for next-to-deploy units. The reset ROC drill identified several areas in which an enterprise approach and proper demand cues would produce better, more timely decisions. These improved decision models translate directly into increased predictability, decreased turbulence and better quality of life for our soldiers and families.

Human Capital Core Enterprise. The Human Capital Core Enterprise (HCCE), led by the Assistant Secretary of the Army for Manpower and Reserve Affairs and the U.S. Army Training and Doctrine Command (TRADOC) commander, supports the execution of ARFORGEN by meeting the personnel requirements of the Army. At the strategic level, HCCE develops and deploys an approved human capital strategy to advise the Secretary of the Army on Army-wide personnel issues and priorities that sustain readiness and preserve the all-volunteer force. At the operational level, HCCE recruits, trains, educates and develops soldiers, civilians and leaders for America's Army to meet current and future requirements.

The Human Resources Command, Army G-1 and other elements of the HCCE have taken on the challenge of phasing out stop-loss while maintaining readiness. Approximately 13,000 soldiers were affected by the Secretary of Defense's decision to phase out the policy.

The HCCE is also working to synchronize the professional development tracks of our enlisted, officer and civilian populations. For example, GEN Martin E. Dempsey, the TRADOC commander, has identified the loss of 1 million man-hours due to Basic Officer Leader Course backlogs. Concurrently, the HCCE is also conducting the accessions pilot, which employs end-to-end value-chain mapping and analysis to examine and improve a number of processes at the U.S. Army Accessions Command.

Materiel Core Enterprise. The Assistant Secretary of the Army for Acquisition, Logistics and Technology—ASA (ALT)—and the Army Materiel Command (AMC) commander lead the Materiel Core Enterprise (MCE). The strategic goal of the MCE is to deliver fully integrated acquisition, logistics and technology capabilities to America's warfighters. The MCE executes and manages the Army-wide materiel life cycle and its outcomes by coordinating among all of the materiel solutions organizations and stakeholders. It incorporates all of the functions of the materiel life cycle including research, development, acquisition, testing, distribution, supply, maintenance, industrial base operations and disposal.

ASA(ALT) and AMC have developed a transformation plan that enables all members of the materiel enterprise community to work together toward a common strategic goal.

Services and Infrastructure Core Enterprise. The Services and Infrastructure Core Enterprise (SICE), led by the Assistant Secretary of the Army for Installations and Environment and the Installation Management Command (IMCOM) commander on behalf of the Vice Chief of Staff of the Army, provides essential services, infrastructure and operational support worldwide to enable an expeditionary Army and sustain soldiers, their families and civilians. SICE seeks to gain economies of scope and scale, increased efficiency and improved effectiveness in support of ARFORGEN.

Currently SICE is using an enterprise approach to develop and implement the Army's sustainability campaign. Transitioning individual initiatives to enterprise-wide synchronization efforts enables the Army to assess risks and effects across the four CEs and focus resources for maximum advantage.

For example, this month, core logistics functions at garrisons are scheduled to align with the Materiel Core Enterprise and the Services and Infrastructure Core Enterprise, affecting $1 billion in funding. The Directorate of Logistics realignment transfers all maintenance and "tactical supply" functions to AMC. The initial focus is directed at installations in the continental United States, Alaska and Hawaii, and will realign according to the five major areas of personnel, funding, facilities, contracts and equipment. The first two tasks are to transfer control of maintenance contracts to AMC and task-organize into the two new logistics structures on the garrison. Once the realignment is complete, an installation will have two new logistics organizations: AMC's Directorate of Materiel and IMCOM's Directorate of Support Services.

The Army is working today to set the conditions for the future to fulfill our strategic role as an integral part of the joint force. Institutional adaptation provides the path to improved decision making, increased versatility, and a more effective and efficient force—all while doing the right thing for our soldiers and families. While the milestones achieved by the HQDA and core enterprises are noteworthy, there is much yet to be done. The Army needs every soldier and civilian to embrace the necessary changes and help spread the vision of a more collaborative innovative force. Institutional adaptation begins with individual adaptation, and individual adaptation begins with you. ★



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Growing and Rebalancing Our Army During a Time Of Persistent Conflict

By LTG Michael D. Rochelle*
Deputy Chief of Staff, G-1

America's Army remains the strength of our nation. After nearly eight years of persistent conflict, our soldiers, civilians and families have proven their amazing strength through their resilience and continued dedication to accomplishing our nation's mission.

As this is the Year of the NCO, it is fitting that we highlight NCOs, the backbone of our Army. Many of our NCOs have borne multiple combat tours in Iraq and Afghanistan, leading our nation's sons and daughters into harm's way on a daily basis. The Year of the NCO is a testament to their strength and commitment and reminds us of the integral role NCOs play in the

*LTG Rochelle has retired. MG Gina S. Farrisee has succeeded him on an interim basis.





Now stationed at U.S. Army Garrison Humphreys, South Korea, SFC Warnie Stokes, 520th Maintenance Company, and her husband, 1SG Chelsie Stokes, 52nd Ordnance Company, are former Army Advanced Individual Training drill sergeants with more than 40 years of combined service.

defense of our nation. Our nation and our Army owe these NCOs gratitude and respect. The stresses of multiple deployments are taking a toll on all of our soldiers. Retention rates show, however, that an overwhelming majority of these professionals are choosing to continue to serve with distinction in a very fluid and demanding environment.

Our Army's greatest priority now is restoring the balance of our all-volunteer force so that the needs of our soldiers, civilians and their families are met during this period of prolonged conflict and repeated separations. The adaptive nature and persistent efforts of our enemies make this a daunting challenge. The following imperatives, however, must and will be met.

Growth and Sustainment

The first priority to achieving balance is growing and sustaining an all-volunteer force that is both agile and adaptive in responding to our nation's threats and requirements. Our efforts in this area have proven very successful. The active component growth target of 547,400 for fiscal year (FY) 2010 has already been achieved and has been bolstered recently by the congressional authorization of a temporary end-strength increase of up to 22,000. In addition, the National Guard and the Army Reserve have reached their goals of growing to 358,200 and 206,000, respectively. This is no small feat given the operational tempo of the world's premier fighting force. The Army's more than one million soldiers know the challenges that our nation faces, and these brave men and women have readily stepped forward to answer the call to serve a cause greater than themselves. Still, the realities of what it takes to recruit and retain the all-volunteer force, as well as ensure the well-being of wounded warriors and survivors of this war, have proven challenging.

The state of the nation's economy, coupled with the decision to reduce troops in Iraq, has contributed to a new strategic approach to recruiting and retention. With adjustments made across our recruiting and retention missions for FY 2009, we now see a marked increase in the quality of recruits in fiscal years 2008 and 2009. The Army's percentage of new enlisted soldiers considered "high quality"—with a Tier 1 education (high school diploma)—increased by 2.1 percent in 2008. In addition, recruits who scored well (50–99 percent) on the Armed Forces Qualification Test (AFQT) increased 1.6 percent, and recruits who scored poorly (30 percent and below) on the AFQT decreased 1.2 percent. The Army is expected to exceed every DoD quality-mark goal in all components for FY 2009.

In our efforts to be an employer of choice, especially among millennials (those born between 1980 and 2000), we have shaped our recruiting efforts through a relevant mix of innovative marketing and advertising, incentives and bonuses. The Army will remain adaptive to the recruiting environment. Engaging in emerging social networking



LTG Michael D. Rochelle *was the deputy chief of staff, G-1. His previous assignment was director of the Installation Management Agency. He began his Army career as a forward observer and later fire direction officer for C Battery, 1st Battalion, 321st Field Artillery, 101st Airborne Division (Air Assault). He has commanded the U.S. Army Recruiting Battalion, 1st Recruiting Brigade (Northeast), in Brunswick, Maine, and was previously the G-1/adjutant general (Personnel) for the 101st Airborne Division. He served as the assistant deputy chief of staff for Base Operations Support for the U.S. Army Training and Doctrine Command and later became the installation commander for Fort Monroe, Va. He served as the special assistant for general/flag officer matters for The Joint Staff before becoming the senior military assistant to the deputy secretary of defense for the Office of the Deputy Secretary of Defense. He served as the special assistant to the Army's deputy chief of staff for Personnel and has commanded the U.S. Army Soldier Support Institute and the U.S. Army Recruiting Command. LTG Rochelle has a master's degree in public administration from Shippensburg University.*

technologies such as blogs, wikis, texts and Twitter as well as traditional media such as television, print and word of mouth, we continue to demonstrate to this generation that the Army is like no other organization in the world in its ability to foster and develop many of the qualities desirable to future employers.

Programs such as military occupational specialty 09L (foreign language proficiency) and military accessions vital to the national interest (MAVNI) are examples of innovative recruiting methods for accessing individuals with critical skills. Since 2003, the Army has recruited more than 1,500 soldiers as military interpreters and translators under the 09L program. The MAVNI pilot program was launched in February to help the Army attract high-quality individuals with exceptional skills in health-care professions or one or more of 35 languages. MAVNI recruits are non-U.S. citizens who have been legally present in the United States for two or more years and speak a designated and critically needed language, or are licensed health-care professionals who do not have permanent residency.

Another innovative recruiting program is the Army Preparatory School (APS), which affords prospective applicants who score well on the Armed Services Vocational Aptitude Battery Test but lack a high school diploma the opportunity to complete a General Educational Development (GED) certificate prior to beginning basic training. The Army expects 85 to 90 percent of those who qualify for the APS to earn their GED within four weeks. These results have far exceeded expectations.

The need for highly trained, mobile and dedicated civilians has also become paramount to the Army's success. The Army today includes more than 287,000 Department of the Army civilians; more than 4,600 of them are serving in U.S. Central Command's area of operations. Thus recruiting and retaining quality civilians is critical. The U.S. Army Civilian Human Resources Agency (CHRA) provides comprehensive HR services, advice and support for the full range of HR functional areas. Recently, CHRA's workload grew dramatically with Base Realignment and Closure, joint basing, in-sourcing, Army transformation and Grow the Army initiatives. CHRA will continue to lead the way to recruit and staff the Army's civilian labor force as requirements continue to increase in mission-critical occupations.

Retaining combat-experienced veterans is critical to current and future readiness. The Army continues to achieve success in this area as well. Currently, 53 percent of all reenlistments occur in theater, primarily due to the Army's careful and deliberate process of adjusting retention bonuses to target soldiers assigned to specific units in the Operations Iraqi Freedom/Enduring Freedom areas of operations.

The modular force has a substantially higher percentage of officers, requiring that we assess and retain an even higher number of qualified leaders. The Army projects being short 3,000 captains and majors through FY 2010, with that number dropping to about 2,500 in FY 2011. We project the Army will be at or above full strength for captains in FY 2012 and beyond, but will remain short 1,200 to 1,400 majors (10 to 12 percent) through FY 2013. While filling major vacancies in the coming years remains a challenge, Army officer retention is above historic rates and most of the more than 6,000 captain and major vacancies projected in FY 2006 for FY 2010 and beyond are now projected to be filled. Each quarter, we see improved out-year strength projections as we assess the effects of officer retention measures and the increase in officer accessions that began in FY 2006.

Increased Dwell Time

We must restore the balance between deployments and dwell time for our soldiers. Currently, the Army is working to achieve a goal by the end of FY 2011 that calls for two years of dwell time for every one year deployed for active component soldiers, and four years dwell time for every year National Guard and Army Reserve troops spend deployed. The Army will accomplish this without the recently discontinued stop-loss policy. It is imperative for the health of our Army families



PFC Daniel McAfee (left) and PVT Ishmael Dixon complete math exercises at the Army Preparatory School, Fort Jackson, S.C., where soldiers earn their General Educational Development certificate, the equivalent of a high school diploma. More than 2,000 soldiers have graduated since the program began in August 2008.



SSG Crystal Basham (left), a Better Opportunities for Single Soldiers representative at Redstone Arsenal, Ala., offers information about I.A.M. Strong, the Army's campaign to combat sexual harassment and sexual assaults by engaging all soldiers to prevent inappropriate behavior before it occurs.

to increase the time our soldiers spend at home between deployments. Establishing a more stable deployment/dwell cycle also leads to increased predictability for our soldiers and families. This is not only the right thing to do—it also improves our force management policies and enhances our ability to effectively project force requirements and force stability. Our MANPRINT program also contributes to reducing stress during deployments by ensuring that new equipment for soldiers is designed for easy use—technology is "fitted to the soldier," putting the soldier first, and equipment is ready to perform.

Again, the stresses on the force coupled with the constantly changing nature of our adversaries make this a challenging prospect. If we've learned anything in the past eight years, it is that the commitment to our soldiers and their Army families is a responsibility we as senior leaders cannot delegate.

Suicide Prevention and Education

This is the first time in our nation's history that an all-volunteer force has engaged in conflict for such a protracted period. Our soldiers and families continue to carry this heavy burden for our nation. Although our soldiers continue to do all that we ask of them, our suicide rates climbed to alarming levels earlier this year. We have worked to reverse the tragic increase in soldier suicides and have witnessed some positive results as the numbers have started to decline; even one loss to suicide, however, remains one too many.

Reducing suicide is a top priority throughout the entire Army. Under the leadership of the Vice Chief of Staff of the Army, the Suicide Prevention Task Force was organized to integrate the total Army's effort in combating suicides. Concurrently, we launched a three-phase suicide-prevention training effort to educate our soldiers, civilians and families to increase awareness of suicide risk factors and warning signs. The goal was to encourage intervention for at-risk soldiers with an Army-wide suicide stand-down, chain teaching and annual sustainment training. In recent congressional testimony, the Secretary of the Army stated, "Every NCO knows how to recognize the symptoms of a heatstroke and knows what to do about it. Our goal is for every soldier in the Army to be able to identify the symptoms of a potential suicide and know what to do about it." We impress upon our soldiers that it is an act of strength, not weakness, to ask for help when needed. The Army has asked for help and partnered with the National Institute of Mental Health in a five-year, $50-million study to incorporate their expertise and assistance into our suicide-prevention efforts.

Sexual Harassment/Assault Response and Prevention

The Army's sexual harassment/assault response and prevention program was showcased during two annual sexual-assault prevention summits in September 2008 and April 2009 with the launch of the I.A.M. Strong bystander intervention and prevention campaign. The I.A.M. Strong campaign—urging soldiers to intervene, act and motivate—is an integral part of the Army's goal to prevent sexual assault and harassment. The program focuses on changing attitudes and behaviors so that sexual assault is not tolerated. It's only fitting during the Year of the NCO that the Army continues to place emphasis on the role of our NCOs as the standard-bearers in the prevention of sexual assaults. The Army spent more than $20 million in FY 2008 on the sexual-assault prevention campaign; we are projected to expend more than $42 million in FY 2009 and approximately $67 million in FY 2010. To date, the campaign is successfully leading cultural change and establishing the Army as the blueprint for the nation on sexual-assault prevention.

The Army continues to field the finest combat force in the world, capable of devastating combat operations and compassionate civil-support actions. We continue to recruit, train and retain the best of our nation. Soldiers continue to rise to the call to duty and demonstrate a resiliency that is nothing short of amazing. Our commitment to them must equal or exceed their level of commitment to the nation. Similarly, our commitment to their families can be no less than their sacrifices on behalf of their loved ones. This we'll defend. ★

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Rebalancing the Army Military Intelligence Force

By LTG Richard P. Zahner
Deputy Chief of Staff, G-2

There are three imperatives to rebalancing the military intelligence (MI) force: institutionalize and enhance core intelligence capabilities, invest these capabilities where "risk-to-force" is greatest and generate sufficient capacity to sustain mission-essential support to committed forces in an Army force generation (ARFORGEN) framework. A holistic rebalance of the MI force structure and equipping strategy requires difficult decisions; once completed, however, it will allow commanders to focus intelligence resources to achieve decisive impact and define deliberately accepted risk.



Historically, the Defense Department's intelligence, surveillance and reconnaissance (ISR) resourcing strategy assumed that intelligence sensors and analytic systems designed to discern

and predict the actions of hierarchically organized and centrally directed combat formations during major combat operations (MCO) would remain sufficiently relevant and effective during post-hostility operations or against irregular warfare mission requirements. Indeed, not only were there few major programmatic or structural initiatives to focus against the irregular warfare threat, but the high cost of the MCO collection platforms also limited their numbers to—essentially—a single theater contingency set with a hedge capability to initiate a collection baseline for a second major contingency, pending reinforcement from the first. Always in high demand, these low-density theater resources have formed the core of the joint force ISR enterprise, with ad hoc contingency support from the combat support agencies.

In an Army MI context, meeting the demands of the "greater" case—assessing the progress of echeloned land forces through constricted terrain and weather to meet doctrinally defined rates of advance in pursuit of a force-oriented objective—was thought sufficient, when properly refocused, to subsume the "lesser" cases of irregular forces and unconventional, networked threats. Synchronizing the application of organic and joint fires against an echeloned enemy formation and discerning the culmination of an enemy maneuver or defense was (and remains) central to corps- and division-level major combat operations. Consequently, Army intelligence capabilities were generally consolidated into theater- and corps-level brigades, with divisional MI battalions providing direct support companies to maneuver brigades. Intelligence operations were largely focused top-down, with central analytic centers synthesizing the feeds from single-discipline sensors into all-source products or periodic "reads." The ability to "reach back" to centers of analytic expertise and data repositories was thought to be central to success; dissemination was framed in a "space-to-mud" information flow. In a target-driven intelligence effort, geolocational accuracy and timeliness of reporting were dominant information criteria; target identification as an enemy military entity sufficed for legal engagement, and enemy force disposition was central to predicting intent.

The intelligence challenges in discerning and defeating threats defined by adversaries organized around networks rather than hierarchically organized military formations have called into question our long-standing investment strategy and how we have organizationally distributed our collection and analytic capabilities. Defeating networks and protecting populations requires identity resolution as the essential criteria of intelligence information. Precise location and timeliness remain important, but prosecution of an intelligence campaign against a networked adversary requires a bottom-up struggle for knowledge that recognizes that identity and intent are critical to most operational decisions, from engagement to kill/capture. Addressing the intelligence challenges of a networked enemy in Iraq and Afghanistan, the Army's transition to modularity—under way since 2004—has moved key intelligence assets from the corps MI brigades and divisional battalions to the brigade combat teams' (BCTs) MI companies to provide a more robust MI force-in-contact. However, the continued prevalence of ad hoc intelligence formations in both operational theaters indicates that we lack both the required range of core intelligence capabilities to fully address a networked adversary and sufficient capacity in our ARFORGEN force packages to meet an enduring operational demand.

An unintended aspect of modularity has been the effective bifurcation of the MI force, with 36 percent of the active force assigned to BCT military intelligence companies and corps-and-below analytic staffs, and 60 percent assigned to Army service component commands (ASCCs) and combat support agency (CSA) missions. The structure to support the collection, processing and exploitation, analysis and dissemination requirements of an operational-level headquarters or divisional operations is quite limited; the intelligence capabilities of our corps and divisions remain critical to the successful execution of major combat operations. A full spectrum force requires core intelligence capabilities to address both networked and hierarchical adversaries, and thus a careful alignment of the Army's full range of intelligence resources in support of modularized headquarters and formations from the corps to company levels.

Achieving a meaningful realignment of intelligence resources means that no aspect of the MI force can be off the table; modularity effectively stopped at the corps MI brigade after only addressing a third of the available force structure. We have sought to sustain support across the full range of Army, joint and defense organizations while simultaneously attempting to restructure to meet the operational demands of two conflicts. The result is that we have failed to achieve a critical mass of intelligence support in either; echelons above corps are manned at 80 percent at best, while ad hoc MI requirements frustrate the ARFORGEN process.

The proposed Army MI rebalance strategy hinges on placing capability and capacity where risk-to-force is greatest. While there are very practical reasons for this align-



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ment, this central tenet recognizes the reality that America's center of gravity is its national will, and its strategic vulnerability is the perception that current casualties are inconsistent with projected outcomes. Success in an era of persistent conflict requires not only decisive military overmatch, but also the ability to outlast competitors and adversaries who will seek to exploit our strategic vulnerability through a hybrid of conventional and irregular capabilities. Strategic or even operational surprise is not impossible, but it is far less likely than a loss of national will during the course of an extended campaign. Risk-to-force thus maps to risk-to-strategy, with the management of both tied to decisive intelligence investments at the tactical level.

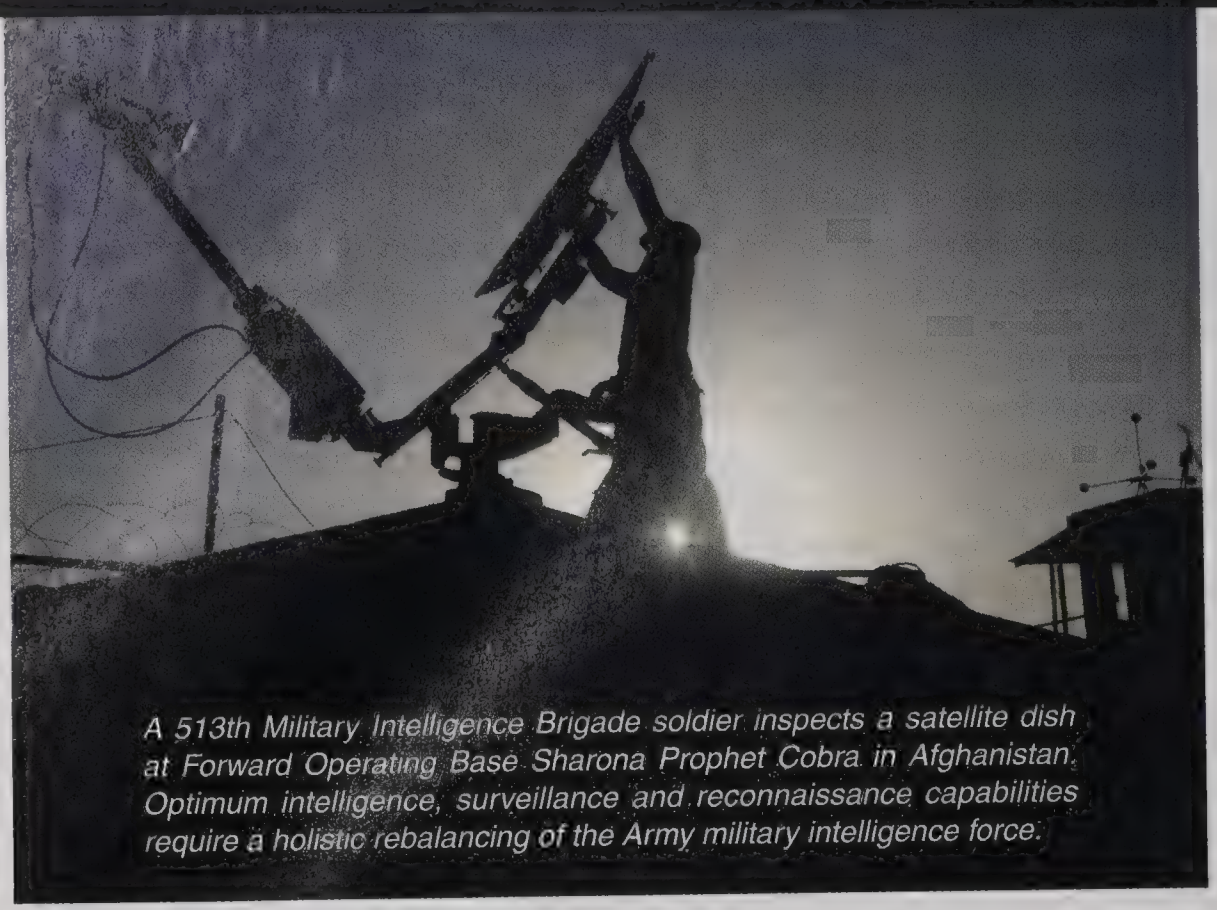
The Army's comparative advantage is not to be found in replicating the capabilities of interagency, intelligence community, combat support agency or service counterparts. The Under Secretary of Defense for Intelligence has interested more than 4,700 analysts in nine combatant command (COCOM) joint intelligence operations centers (JIOCs). With the creation of JIOCs for strategic and cyber commands, there will be more than 5,000 intelligence professionals dedicated to the theater commanders, backed by thousands of experts at the Defense Intelligence Agency and at the National Security and National Geospatial Intelligence Agencies. Our theater-support Intelligence and Security Command (INSCOM) brigades played an essential role in an era of a forward-deployed Army; while useful today, they are clearly not the centerpiece of the COCOM intelligence structure. Given the choice between losing a JIOC and an INSCOM brigade, no combatant command J-2 would forgo the JIOC. Similarly, our theater-aligned aerial exploitation battalions provide useful augmentation or niche capabilities to the commands, but are not the foundation of a theater ISR plan—that role is best executed by the Air Force, supplemented by national capabilities. The Army's comparative advantage is our ability to enable our ARFORGEN force package with decisive intelligence capabilities while sustaining essential support to the Army theater components and combat support agencies. The Army MI end state should be an optimized force structure that provides core capabilities in support of the brigade combat team and division/corps full spectrum operations on a sustained ARFORGEN cycle—readily available to our readiness enterprise.

Filling out the force from the bottom up as opposed to the traditional "consolidate, then allocate" paradigm is central to unmasking shortfalls in key intelligence capabilities required for sustained support of a rotational Army. The proposed rebalance will remove dedicated intelligence collection assets from ASCCs/combatant commands and instead afford their access through the Department of Defense's global force management and allocation process. Essential analytic and force protection capabilities will be assigned to the ASCCs along with dedicated reserve component support to theater engagement missions in theater intelligence groups. Support to CSAs is fully sustained with a careful mix of both military and Department of the Army civilians, providing a rotational basis for military professional development while maintaining a sustained cadre of civilian experts in the increasingly complex fields of counterintelligence, human intelligence, cryptography and cyber/computer network operations. This strategy fundamentally realigns Army MI from a theater ASCC-focused framework to one of sustaining an optimal set of core intelligence capabilities for each ARFORGEN force package, and potentially realigns more than 4,500 billets for investment in the ARFORGEN force pool. (Any realignment for Korea is deferred for the immediate future, given the complexities of the operational environment.)

More than seven years of combat missions have been rigorously evaluated by a number of studies to identify which intelligence capabilities generate decisive outcomes. The 2008 Training and Doctrine Command and 2007–09 Office of the Secretary of Defense cross-cutting studies assessed conventional and special operations forces and determined that a relatively small set of core and enabling capabilities is essential to sustaining an intelligence campaign against a networked adversary. Pursuit of networked threats involves a number of operational mission sets, but the most stressful on the ISR framework is the execution of the find, fix, finish, exploit, analyze and disseminate (F3EAD) cycle



Soldiers with the 513th Military Intelligence Brigade, Intelligence and Security Command's contingency force, work with an interpreter to communicate with local nationals in eastern Afghanistan during a mission in support of Combined Joint Task Force-82.



A 513th Military Intelligence Brigade soldier inspects a satellite dish at Forward Operating Base Sharona Prophet Cobra in Afghanistan. Optimum intelligence, surveillance and reconnaissance capabilities require a holistic rebalancing of the Army military intelligence force.

designed to detect, track and isolate key elements of an adversary network. The driving capabilities to sustain this F3EAD cycle include: sustained direction of multiple full-motion video airborne sensors, an ability to geolocate targeted communications devices, exploitation of detained individuals (interrogation) and captured media, human intelligence (HUMINT) acquired through tactical source operations, and content of targeted adversary communications. While individually essential, the integration of these driving capabilities into multifunctional teams to provide time-sensitive multidisciplined intelligence collection, exploitation and analysis significantly accelerates execution of the F3EAD cycle and provides unique agility in pursuit of adaptive, security-conscious networks operating within the population.

The proposed rebalance strategy envisions sustained support of an ARFORGEN force package consisting of one operational headquarters, four to five division headquarters and 10 to 15 BCTs through reinvestment of the 4,500 billets from the ASCC and CSA conversions, along with the reutilization of today's battlefield surveillance brigades in a series of new structures. The base feature would be a company intelligence support team for each BCT maneuver company, composed of two analysts and one HUMINT soldier. These teams may be consolidated at battalion level or the BCT military intelligence company, but would provide first-line HUMINT, exploitation and analytic support. The BCT military intelligence company would be significantly enhanced with the creation of multifunction teams to provide precision geolocation and interception of signals, source operations and interrogations, and time-sensitive site exploitation of captured documents and media. The company would have five eight-soldier teams (each capable of split operations) and access to national cryptographic and HUMINT data via dedicated management cells and a captured-media exploitation team. The BCT would be resourced to support three orbits of Shadow unmanned aerial systems and gain another three orbits from the aerial exploitation and combat aviation brigades. In total, this represents a potential growth of 78 percent in the BCT military intelligence company, and would permit the BCT to routinely operate without further ISR augmentation.

Four active and three Army Reserve multifunctional MI brigades provide the sustained ARFORGEN intelligence, surveillance and reconnaissance support above BCT level. Using today's battlefield surveillance brigade, each would support an operational (corps) headquarters or multidivision operation with two MI battalions—each with eight multifunctional teams, a nine-team counterintelligence/security company to address hostile intelligence/insurgent base camp infiltration, and an interrogation company capable of staffing two division holding areas or one theater interrogation facility. The MI brigade would also host a technical support company to provide robust ISR communications support across the theater, unmanned rotary-wing ISR and sensor emplacement, and monitoring, processing, exploitation, dissemination and recovery of electronic tracking data.

Central to the ARFORGEN intelligence, surveillance and reconnaissance package is an "aerial ISR layer" anchored to the concept of six dedicated orbits to each of 15 BCTs (90 total); BCTs beyond this require joint augmentation. Sixty of the orbits are organic to the BCT and the combat aviation brigade unmanned systems; the remaining 30 are provided by two forward-deployed full spectrum aerial exploitation battalions employing a mix of manned turboprop, unmanned helicopters and long-duration hybrid airships to provide sustained high-resolution video, signals intelligence, radar ground tracking and communications relay. Built from today's aerial exploitation battalions and Task Force ODIN, the units would sustain the collection platforms forward and rotate crews from an active and a National Guard aerial exploitation brigade.

Finally, the strategy envisions deliberate use of the entire Army MI force through various enterprises, which would provide cohesive, tailored and sustained support to both ARFORGEN deployed forces and emergent Army intelligence requirements from ISR resources in the ARFORGEN train/ready cycle.

This strategy represents a holistic rebalancing of Army military intelligence to optimize core ISR capabilities to the tactical/operational formations for which both risk and payoff are greatest. The rebalance can be accomplished within existing resources, but it requires accepting risk at the operational (ASCC) level. Attempted incremental adjustments of existing MI structures have failed to meet the demands of sustained ARFORGEN support. Eight years of conflict have provided a much deeper appreciation of the range of capabilities required to successfully support a full spectrum Army. The concepts outlined here provide investment (and, by necessity, divestment) options for Army senior leadership that frame the essential characteristics of an enduring MI force poised to meet the challenges of a period of persistent conflict. ★



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A Balanced Army For the Future Strategic Environment

Our goal is to build a versatile mix of tailorable and networked organizations, operating on a rotational cycle, to provide a sustained flow of trained and ready forces for full spectrum operations and to hedge against unexpected contingencies at a tempo that is predictable and sustainable for our all-volunteer force.

—GEN George W. Casey Jr.

By LTG James D. Thurman
Deputy Chief of Staff, G-3/5/7



America's Army continues to perform magnificently at home and abroad, providing vital landpower contributions to combatant commanders around the globe. With nearly 265,000 active component (AC) and reserve component (RC) soldiers serving in nearly 80 foreign countries, conducting full spectrum operations to protect and preserve U.S. interests, our soldiers and their families continue to answer the call to duty with unparalleled commitment and professionalism. Simultaneously conducting offensive,

defensive, stability and civil-support operations every day in Iraq and Afghanistan, our heroic soldiers demonstrate the power of the Army's operational concept—full spectrum operations—and the inherent versatility of our modular formations.

While the operations in Iraq and Afghanistan are each unique, they share indicators of a change in the character of 21st-century conflict that we are witnessing around the globe, the emerging concept of hybrid threats. While current trends suggest that the future security environment will present similar conflicts, history teaches us to approach confident predictions with wariness. Our goal in the 21st century is to create an Army that preserves and strengthens our military superiority against a broad range of hybrid threats. We must balance the absolute requirement to win in Iraq and Afghanistan with the need to transform and build readiness for the future. The Army will continue to improve training, equip soldiers with the best equipment available and grow our leaders to be agile, versatile professionals in order to provide sustainable, interoperable, lethal and expeditionary capabilities across the full spectrum of operations.

As we continue to draw down responsibly in Iraq and prepare the Army to address emerging requirements in Afghanistan, the broader strategic approach is critical: We need to institutionalize a robust capability to advise, assist and train our partner nations to provide for their own stability and security. A force fully trained and resourced to fight hybrid threats and conduct stability operations will create the security and stability needed now and throughout this era of persistent conflict. After more than seven years of war, the Army now has one of the most combat-seasoned professional forces in our nation's history. On the other hand, this long-term high level of demand has placed unsustainable stress on our all-volunteer force and has diminished the Army's strategic depth. The short period between deployments has not provided sufficient time for soldiers and their families to recuperate and for units to conduct training for operational environments other than that of their next deployment. In short, we have been expending readiness as fast as—and sometimes faster than—we can build it, resulting in an accumulation of risk over the past several years. When demand eventually does come down, we will need a significant amount of time and resources to reset the force and restore strategic depth.

Restoring Balance. The Army continues to make progress towards restoring balance. The Army Chief of Staff's four imperatives—sustain, prepare, reset and transform—establish a realistic strategy for restoring balance to the Army by 2011 and increasing readiness for the future. In order to fulfill all of the missions required of it, the Army must *sustain* its all-volunteer force, *prepare* soldiers for future contingencies, *reset* equipment and personnel, and *transform* the force to remain dominant across the full spectrum of operations. From these imperatives flow a number of strategic considerations and priorities that will allow us to set conditions for the future. First, our Army's future readiness demands a rotational readiness cycle that will provide cohesive units to combatant commanders. Second, lessons learned from eight years on the battlefield require that we continue to reset the force and modularize our formations. Finally, we must take care of our soldiers and families who are suffering from the cumulative effects of multiple deployments.

Our nation depends upon a strong Army with the global reach and persistent presence to deter threats while it delivers lethal warfighting capabilities whenever and wherever deterrence fails. To this end, we must balance the force with the right set of capabilities, institutionalize our new training and operations doctrine, and strengthen the profession to continuously enhance our ability to prevail in the wars we are in and the contingencies we are most likely to face in the years ahead.

Army Force Generation (ARFORGEN). ARFORGEN enables us to put the Army on a rotational readiness cycle so that we can continuously provide the right mix of cohesive units to combatant commanders for the types of enduring missions we see in Iraq and Afghanistan. ARFORGEN enables the Army to use our balanced mix of modular formations as a "base of adaptation" to meet combatant commander requirements. It is the cyclic force-generation process that enables us to continuously adjust the training, equipping and staffing of our units to suit the requirements of emerging missions and apply the lessons of past missions. With ARFORGEN, we are now coming to grips with the vital change that's required to realign our institutional sys

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LTG James D. Thurman *became the deputy chief of staff, G-3/5/7, in 2007. Previously he served as commanding general, U.S. Army V Corps. A native of Marietta, Okla., LTG Thurman was commissioned as a 2nd Lieutenant in the Armor branch. He began his career in the 4th Infantry Division, serving as platoon leader, executive officer and motor officer for 6th Battalion, 32nd Armor, and has commanded at all levels from company to brigade. After attending the Officer Rotary Wing Aviator Course, he commanded the Aero-Scout Platoon and later became the operations officer, Troop A, 1st Squadron, 17th Cavalry, 82nd Airborne Division, Fort Bragg, N.C. Upon completion of the Armor Officer Advanced Course, LTG Thurman was assigned to the 11th Armored Cavalry Regiment, where he was a troop commander and S-3 in the aviation squadron. He served in Operations Desert Shield and Desert Storm and as commander, operations group, U.S. Army National Training Center and Fort Irwin, Calif. Other assignments include director of training, Office of the Deputy Chief of Staff, G-3, U.S. Army; chief, operations, Coalition Land Forces Component Command C3, Operation Iraqi Freedom, Camp Doha, Kuwait; director, Army Aviation Task Force, Office of the Deputy Chief of Staff, G-3; commander, 4th Infantry Division (Mechanized), Fort Hood, Texas; and commander, Multi-National Division-Baghdad, Iraq. LTG Thurman received a bachelor's degree from East Central University and a master's degree in management from Webster University. He is a graduate of the Command and General Staff College and the Army War College.*

ems to support this rotational force-generation model.

In order to ensure that the Army can rapidly adapt to a lynamic strategic environment, we are analyzing the mix of brigade types and how they should be distributed cross the active and reserve components. Our future force nix will provide a balanced set of capabilities for operaions across the spectrum of conflict. As Operation Iraqi reedom demand declines and we convert forces in accorance with our force mix study, ARFORGEN will enable ne Army to generate trained and ready forces for combatnt commanders at sustainable rotational levels.

Within the ARFORGEN construct, increasing the amount f time our soldiers spend at home between deployments dwell) is the single most important element for getting the rmy back in balance. It is important from three perspecves: It gives our soldiers time to recover from repeated ombat deployments; it gives them a more stable preparaon time for their next deployment; and it gives them time to ain and prepare for other missions besides those in Iraq nd Afghanistan. The Army's short-term goal for ARFOREN tempo is to achieve a boots-on-the-ground (BOG)-towell ratio of one to two for the AC and one to four for the C. By the end of 2011, the Army anticipates that both a net duction in demand and our rebalancing of capabilities will sufficient to get us to our short-term goal. Beyond 2011, e Army's long-term goal is to achieve a BOG-to-dwell ratio one to three for the AC and one to five for the RC. At this mpo, the Army would be able to meet a demand for 11 AC igade combat teams (BCTs) and four RC BCTs, thus restorg our strategic depth and increasing our ability to respond propriately in a variety of contingencies.

Modular Force Transformation. The Army is reorganizg from a division-based to a modular brigade-based rce to achieve three primary goals: increase the number available BCTs to meet operational requirements; create nctional and multifunctional support brigade formations common organizational designs; and redesign organizans to perform as integral parts of the joint force to make em more effective across the range of military operations d enhance their ability to contribute to joint, interagency d multinational efforts. Currently the AC has converted is in the process of converting 42 of the 45 programmed Ts and 71 of the 83 programmed support brigades. The my National Guard has converted or is in the process of nverting all 28 of its BCTs and 77 of the 86 programmed pport brigades. The U.S. Army Reserve has converted or n the process of converting 43 of the 57 programmed dular support brigades.

Army modular transformation is also designed to improve capability of units to conduct operations across the full ge of military operations. These modular formations ve as a base of adaptation, which we tailor by adding ening strategies and specific training to meet directed mis-ns. Our success in adapting BCTs for stability operations vident in BCT employment in Afghanistan and Iraq. dular brigades augmented for security force assistance A) are responsible for advancing the capabilities of Afghan and Iraqi security forces. Any of the three modular BCT types—Heavy, Infantry or Stryker—can support SFA.

Reset. The goal of the Army reset initiative is to implement Army-wide processes to restore units returning from deployment to a level of readiness that permits resumption of training and preparation for future missions in the context of the ARFORGEN model. The current reset concept allocates six months (12 months for RC units) upon return from deployment for soldiers to reintegrate with their families, complete individual training and professional education requirements, account for property, undergo new equipment training, and conduct crew/team training and certification, with this activity occurring at home station as much as possible. We will not be able to fully implement the personnel and equipment aspects of reset until late 2011 and beyond.

In order to accelerate institutionalizing the reset concept, however, the Army selected 30 AC and RC units to participate in a reset pilot test. Lessons collected over the past 18 months from the pilot have standardized the process units use to plan and execute critical tasks to restore combat readiness. The reset pilot has also codified the tasks to be accomplished by agencies supporting unit reset (that is, Army commands, garrisons and so on). The reset pilot effort continues to focus on sustaining the supply of ready forces to combatant commanders while the Army adapts our institutional systems and processes to make future reset efforts more effective and efficient.

Train Units and Develop Leaders. For the past several years, Army units have had little time between deployments to train for operational environments other than that of their next deployment or to complete all of the professional military education (PME) requirements we expect of our leaders. Our goal is for the Army to be capable of routinely generating trained and ready units for both current missions and future contingencies and to significantly reduce our PME backlog by the end of 2011. As we anticipate gradually increasing dwell, we must take full advantage of this time to institutionalize training and leader development for full spectrum operations along ARFORGEN timelines. For example, training for operational themes other than the next deployment environment is generally not practical with less than 18 months of dwell (RC 36 months). These units will remain focused on preparing for their next deployment. Units with an assigned area of responsibility will execute a combat training center (CTC)-supported mission rehearsal/readiness exercise prior to deployment, and other brigade-level units will execute a "culminating training event" supported by the battle command training program or the centers of excellence when capacity allows. As dwell increases, however, training for other operational themes is not only practical but imperative to help the Army restore its strategic depth. When units' dwell exceeds 24 months (RC 48 months), they will undergo a CTC-supported exercise based on full spectrum operations in an operational theme other than that of their previously deployed mission environment.

Our leaders are performing superbly in combat in Iraq and Afghanistan today, but we must review and revise our



SFC Margaret Hood and her husband, SSG Mark Hood, reenlist at a Pentagon ceremony in June. The swearing-in, administered by Chief of Staff of the Army GEN George W. Casey Jr., was part of the celebration of the Army's 233rd birthday.

leader-development strategy to prepare the next generation of leaders. To realize this goal, the commanding general of U.S. Army Training and Doctrine Command is currently developing a new leader-development strategy for delivery to the Army this fall.

The revised strategy requires a balanced commitment to training, education and experience. The strategy seeks balance between operational demands for manpower and leader education and broadening experiences within ARFORGEN's cyclical timelines. Army training and leader-development guidance provided in July by Army Chief of Staff GEN George W. Casey Jr. insists that our leaders be given the opportunity to attend PME on schedule—reduction of the Officer Education System, Noncommissioned Officer Education System and civilian PME backlogs by fiscal year 2011 is a top priority.

Reserve Components. The multiple deployments of the 1990s, 9/11 and subsequent contingency operations in Iraq and Afghanistan have necessitated the transformation of the Army's RC from a strategic reserve to an operational force. RC transformation ensures that the *total* Army achieves the strategic depth and operational flexibility needed to meet today's mission requirements and those in the future. To date, Army RC transformation has included improvements in medical/dental readiness; pre- and postmobilization processes; personnel and family readiness; and employer support for RC units, soldiers and their families. In addition, the Commission on National Guard and Reserve Army implementation plans, Department of Defense Directive 1200.17 ("Managing the Reserve Components as an Operational Force"), and an Implementation Plan (Annex I of the Army Campaign Plan) have proposed legislation and initiated efforts to institutionalize policies and procedures needed for an enduring and dynamic operational force. The Army is well on its way to achieving the Chief of Staff's end state of an RC force that is staffed, trained and equipped to be available for mobilization and employment as cohesive units—on a recurrent cyclical basis in accordance with ARFORGEN—while preserving the all-volunteer force and the "citizen-soldier ethos."

Comprehensive Soldier Fitness (CSF) Program. The best way to guarantee our future security is to attract, develop and retain high-quality soldiers and their families. CSF is a structured, long-term assessment and development program to build the resilience and enhance the performance of every soldier, family member and Department of the Army civilian.

CSF was established in October 2008 as a directorate in the Army G-3/5/7. The program focuses on optimizing five dimensions of strength: physical, emotional, social, spiritual and familial. This holistic approach is designed to enhance the performance and build the resilience of the force in this era of persistent conflict and high operational tempo. The program will include both self-development modules and mandatory resilience training that will be implemented institutionally and operationally. In addition, a master resiliency trainer program is being developed to build a cadre of certified noncommissioned officers who will serve as resilience trainers in units. CSF will apply accepted practices and scientific rigor to ensure that all training, interventions and treatments achieve the desired results. Individual assessment and training will begin at accession and, like physical fitness, will include reassessment at appropriate intervals. By enhancing the resilience of our people, we expect to create a greater likelihood for post-adversity growth and success and decrease the incidence of undesirable and destructive behaviors. The ultimate result will be greater readiness of the total force.

Strength of the Nation. As the uncertainties of an era of persistent conflict continue to unfold, the qualities we are building in America's Army today will ensure we always stand ready to protect and preserve our nation's vital interests. The Army will continue to modernize our equipment, adapt our institutions, update our doctrine, and transform soldier and leader development to ensure our nation maintains a versatile, combat-seasoned force, dominant across the full spectrum of operations. Our consistent goal is to maintain a professional, all-volunteer Army that is mobile enough to be expeditionary; capable enough to be versatile; responsive enough to be agile; precise enough to be lethal; robust enough to be sustainable; and flexible enough to be interoperable. Despite the incredible amount of demand and stress on our Army, the professionalism and resilience of the American soldier remain unmatched. The men and women of the U.S. Army serve this nation superbly, willingly and courageously. GEN George S. Patton Jr. stated: "Wars may be fought with weapons, but they are won by men. It is the spirit of men who follow and of the man who leads that gains the victory." Across the globe and in combat operations in Iraq and Afghanistan, our soldiers remain professional and disciplined and live out the true meaning of the Warrior Ethos. They remain the "Strength of the Nation."

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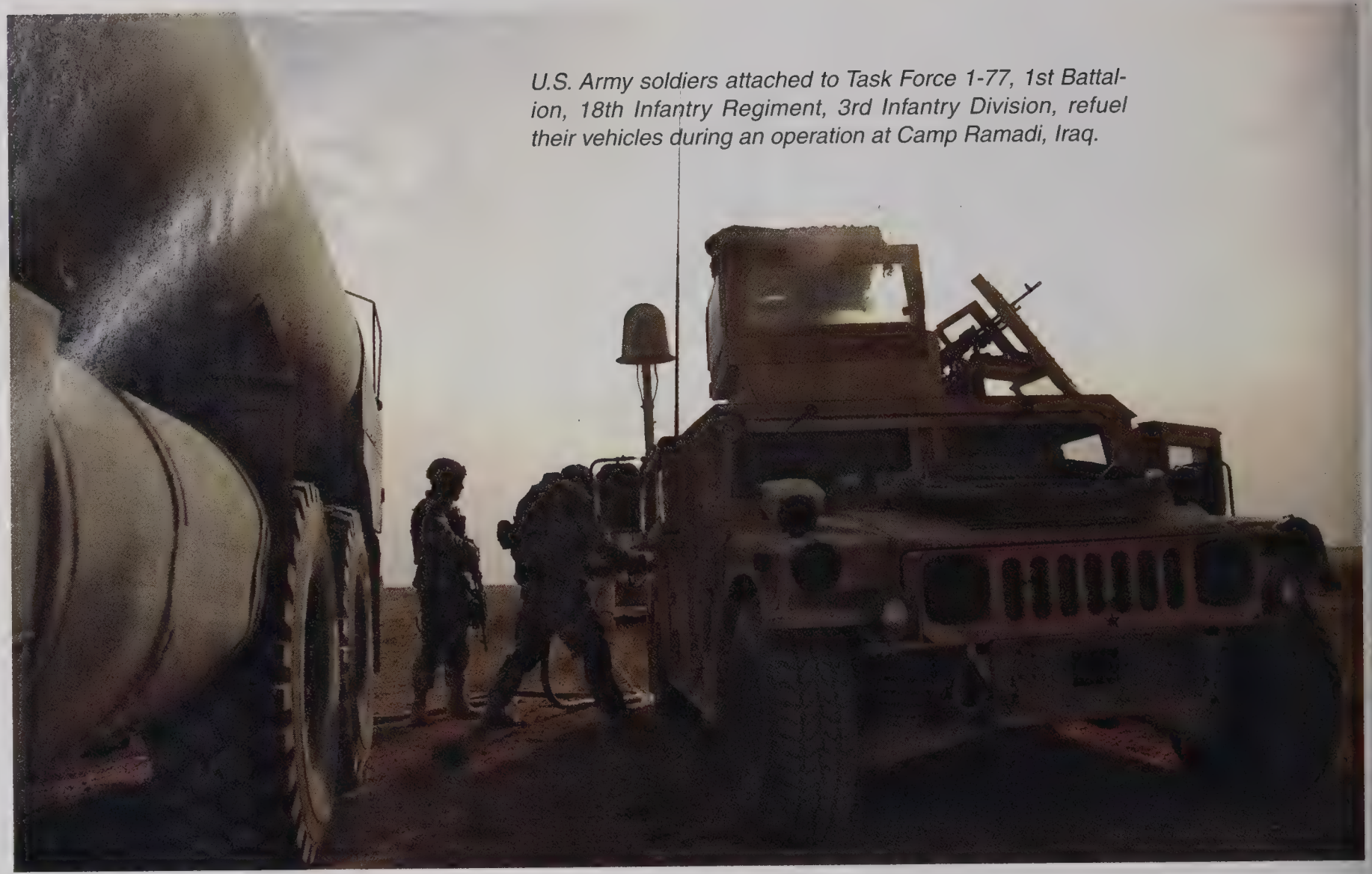
—Secretary of the Army Pete Geren, October 2008

By LTG Mitchell H. Stevenson
Deputy Chief of Staff, G-4



The above quotation highlights something many of us see and know: Every day, somewhere in the world, in dangerous places far from home, our Army goes to secure our liberties, and our logisticians—perhaps unnoticed—are a vital part of that mission.

As difficult as the tasks have been, the greatest demands on Army logisticians are still ahead. Right now, we're building a stronger presence in Afghanistan, one of the most challenging places in the world to move materiel into and out of, and in which



U.S. Army soldiers attached to Task Force 1-77, 1st Battalion, 18th Infantry Regiment, 3rd Infantry Division, refuel their vehicles during an operation at Camp Ramadi, Iraq.

to conduct materiel distribution. We must confront in Iraq what might be the hardest logistics task yet: safely and responsibly drawing down the number of soldiers and civilians in Multi-National Force-Iraq, along with billions of dollars of equipment.

In addition, we're in the midst of one of the most dynamic rounds of rebasing the U.S. Army has ever undergone, moving units and headquarters all over the United States, and from all over the world, to comply with Base Realignment and Closure and with global repositioning.

The new norm seems to be that we are an Army with people and equipment in constant motion. How will logisticians supporting this new paradigm approach the task before us?

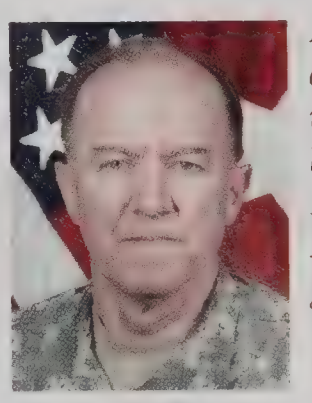
First and foremost, we'll ensure that we maintain the readiness of the world's premier land combat force; second, we'll maintain balance in our strategic capabilities; and third, we'll shape a future logistics force.

Supporting Expeditionary Land Forces

For the Army's force generation process to supply trained and ready forces to the combatant commander, we must have good property accountability and stewardship. Everyone must help ensure that we have all of our property accurately documented, a task easier said than done when property books are split and merged multiple times during each deployment and redeployment.

Since we know that this is a challenge, we've established a property accountability task force to take the pulse of Army property accountability, identify problem areas and adopt solutions. It's working to streamline policies and processes, as well as pursue enhancements to our schoolhouse training and help ensure that we have enough manpower committed to the mission. All efforts are aimed at reducing the burdens of soldiers and commanders as much as possible.

It's also important to have total visibility of our assets. We're developing 360-degree logistics readiness, a tool to



***LTG Mitchell H. Stevenson** is the deputy chief of staff, G-4. His previous assignment was commanding general, U.S. Army Combined Arms Support Command and Fort Lee, Va. He was commissioned a Regular Army ordnance officer from the ROTC program at West Virginia University. Prior to assuming his current command, LTG Stevenson served as executive officer to the commanding general, U.S. Army Tank-Automotive Command; support operations officer, 703rd Support Battalion, Germany; division materiel management officer, 3rd Infantry Division, Germany; executive officer to the deputy chief of staff for logistics, Washington, D.C.; director, plans and operations, Office of the Deputy Chief of Staff for Logistics, Washington, D.C.; and deputy chief of staff for logistics and operations, U.S. Army Materiel Command, Fort Belvoir, Va. He is a graduate of the Infantry Officer Basic Course, Ordnance Officer Advanced Course, U.S. Army Command and General Staff College, and the U.S. Army War College. He has a master's degree in logistics management from Florida Institute of Technology.*

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Military grade connectors link 3 in-line units which terminate in a 12V DC /120V AC converter. Power is via a generator-based supply or directly from a 12V DC source, including Pelican's 9430/60/70 series Remote Area Lighting System (RALS).

The 9500 SLS is tested to a 3 meter concrete drop-test, offering survivability not found in florescent lighting. And because Pelican's proprietary LED lamp modules have an operating life of 50,000 hours, replacement bulbs are eliminated from the supply line.

The 210° beam spread provides 1,000 lumens of even white light, without the strobe and dimming found in current shelter lighting.

To see the growing family of RALS products, and to learn about Pelican's acquisition of Hardigg Industries, visit **www.pelican.com/am.**



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SPC Joseph R. Reese (right) and SPC Jonathan W. Martz use hand and arm signals to guide a heavy-wheeled-vehicle operator for the 233rd Transportation Company, Fort Knox, Ky., backing up a heavy equipment transport military vehicle.

see, assess and synchronize all of our assets. With it, we'll be able to answer three key questions: Is the equipment where it needs to be and serviceable to meet the mission? Is the sustaining base resourced with appropriate priorities? Is the sustaining base performing as planned to support the Army's requirements?

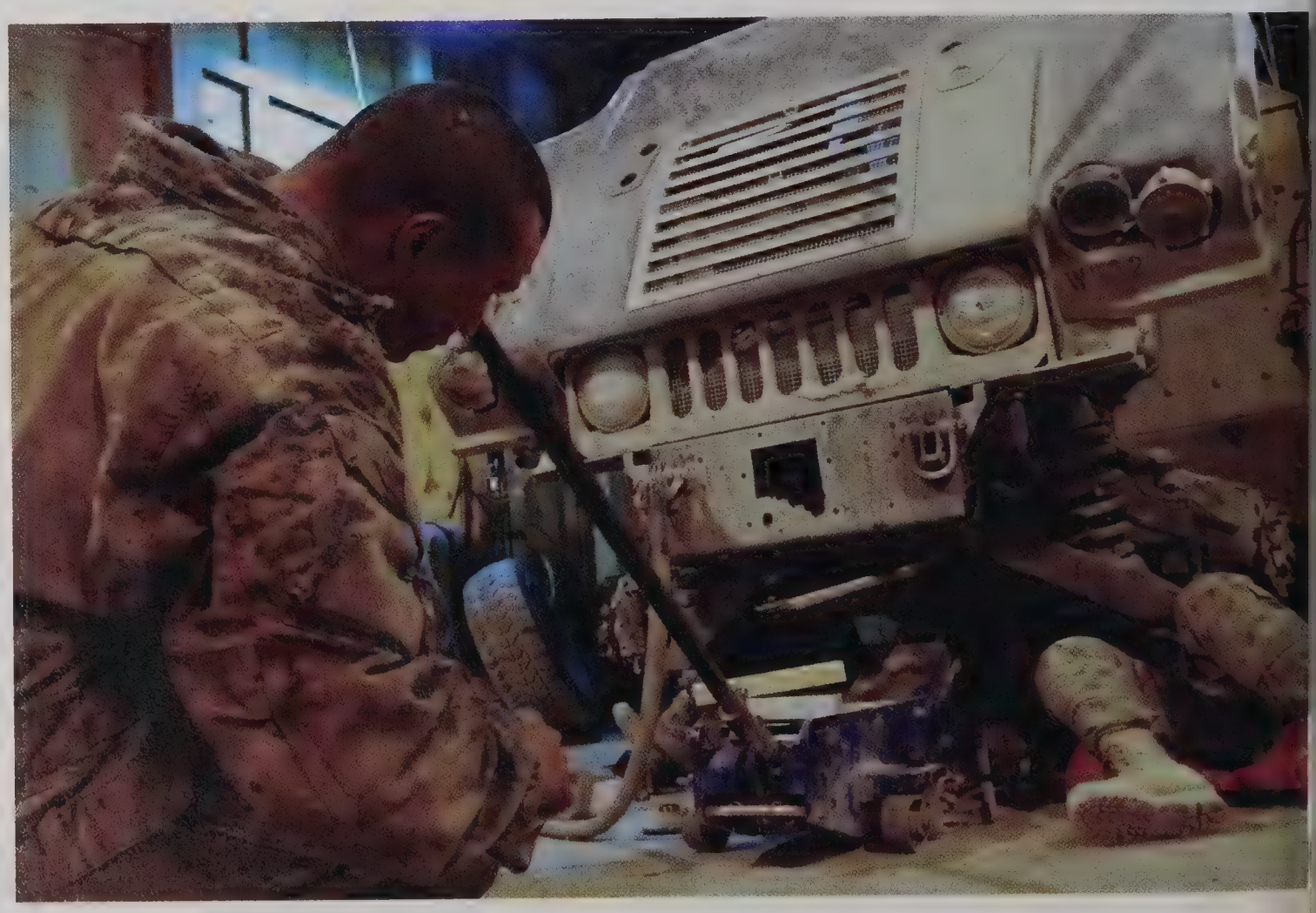
Furthermore, we must develop an enterprise approach to what we are doing. This entails adopting a new mindset—instilling in leaders at all levels an understanding of the costs versus the benefits of decisions we make, to ensure we are good stewards of the resources that have been entrusted to us.

Last summer, we began implementing this concept as we worked to refine the Army's tactical wheeled vehicle strategy. It's no longer good enough to just enumerate a variety of specifications that say that a truck must go this fast or carry this much; we also need to know how much it will cost to maintain, fix and upgrade, considering that 50 to 70 percent of the total costs of weapon systems occur after production.

Using enterprise thinking, we're opening new opportunities for logisticians. One example is an initiative called condition-based maintenance (CBM), which informs logisticians about what is going on in their vehicles and aircraft, both during operation and in terms of capturing historical data. From CBM, logisticians will know what maintenance actions to take before equipment fails and have real-time knowledge of what is needed and where.

CBM will be enabled by the common logistics operating environment, an effort being spearheaded by the Logistics Innovation Agency, where logistics organizational approaches, information and technologies come together in a single architecture that enables logisticians to have total situational awareness. This will be the catalyst for changes in such logistics processes as calls for support, requisitioning items from supply and in-transit visibility.

We also are supporting land forces through new lean, effi-



Mechanics from Headquarters Support Company, 864th Engineer Battalion, raise a Humvee on jacks while determining how to repair it at Forward Operating Base Sharana, Afghanistan.

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AUSA PREVIEW:

THE 9440 REMOTE AREA LIGHTING SYSTEM

AUSA BOOTH #1461
50 FREE i1015 CASES GIVEN AWAY DAILY

9440 RALS: LIGHT WHERE YOU WANT IT



*Included shoulder strap keeps the collapsible **9440RALS** on the move.*

Pelican's new **9440 RALS** light is built for today's remote area of operations. Portable and durable with an 8 hour burn time using a maintenance free NiMH battery . Lightweight enough to hand carry and big enough for area lighting, the 9440 deploys instantly, with no wires, power source or stand needed.

The **9440 RALS** employs 8 extreme duty 1 watt LED lamp modules certified to a lifetime of 50,000 hours with a total brightness rating of 1,200 lumens. The unit self-erects via the tripod release and the telescoping mast reaches a working height of 7 feet.

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cient supply chains, both forward and backward. We've significantly reduced the time it takes to ship major end items and repair parts from Iraq to continental U.S.-based depots, which is essential to our drawdown and to the reset process. We've published policies tailored to each theater for the retrograde of materiel and equipment, and we've started a retrograde task force that provides a monthly forum in which to identify and develop solutions to issues affecting retrograde operations.

We're also focused on the benefits of universal repair parts for our equipment fleets, as exemplified by the commonality in the 10 variants of the Stryker. With 200 different parts, we can account for 70 percent of the repair parts. We'll carry over the lessons learned from Stryker as we develop the new ground combat vehicle.

We've also streamlined how we distribute clothing, a step that has reduced unnecessary spending by hundreds of millions of dollars. Imagine walking into a department store wanting a certain size shirt that is out of stock; the salesperson calls a sister store across town, or in another town, and has the shirt you want delivered within a day or two. Until recently, the Army couldn't do this very effectively, so we've launched a central office where we see how much clothing is on shelves at each installation and redistribute it between installations, worldwide, to where it is needed.

The Army G-4 and G-8 also have partnered to close the readiness gap imposed by items consistently not available to the new modular units we have formed. As we dig into the shortages we are seeing, we've discovered many ways in which we can help; we have already begun to see improvements. In addition, we're working hand in glove with Training and Doctrine Command proponents to be absolutely sure each item authorized on units' modified tables of organization and equipment is, in fact, required.

Rebalancing the Army

Central to rebalancing the Army by 2011 is our ability to reset equipment quickly—within six months for active component units returning from deployment and within 12 months for reserve component units.

It is an enormous task, but we've actually become quite good at it across the enterprise. We expect to repair about 180,000 major end items this year—the equivalent of 30 brigades of equipment—and expect the same repair level for at least the next two years.

The tremendous wear and tear caused by harsh conditions in Iraq and Afghanistan makes the task more difficult. We're operating equipment at rates five to 10 times greater than originally intended, which means we're placing years of wear on equipment in a single year. Stress shows not just on vehicles, but also on weapons, computers, radios and night-vision devices.

The drawdown of the force in Iraq gives the Army a unique opportunity to reallocate our materiel and positively influence overall Army readiness. Logisticians are analyzing what can be moved to Afghanistan, returned to fill holes in units that are not deployed or used to reestab-



Soldiers from 25th Infantry Division, assigned to the Joint Logistics Command, sling load a Humvee to a hovering CH-47 Chinook helicopter at Bagram Air Field, Afghanistan, during Operating Enduring Freedom.

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ographed using NV ics from 25 yards omplete darkness, out infrared light.

*The **9430IR** spotlight reveals weapons in hand and back pocket.*



Pelican's new **9430IR** (infrared) spotlight reaches down-range to provide situational awareness without compromising stealth. 24 infrared lamp modules generate light visible only to forces equipped with night vision equipment. Capable of operating 75 yards out, the 9430IR extends the tactical advantage of night vision technology.

Covert Checkpoint: Now soldiers can establish covert NV checkpoints to asses threats and provide advance warning to exposed personnel.
Perimeter Security: The 9430IR can be hand carried to remote locations. Equipped with night vision and digital communication, forces outside the perimeter can remain invisible and silent while using the 9430IR to report enemy movement.

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lish Army prepositioned stocks. We have only one opportunity to do this right, and our success will be measured by how well we are able to balance competing needs.

We also are investing in technologies that support rebalancing efforts. We are excited about replacing our legacy logistics information systems with the single Army logistics enterprise (SALE). It's a concept for the structure and interaction of Army logistics and the information technology and automation systems that support operations worldwide. SALE is composed of the logistics modernization program at the national level and the global combat support system-Army at the tactical level, as well as a number of related systems that SALE will replace.

Achieving SALE will significantly change logistics, from ordering parts to giving everybody—from the commander in the field to an expert at our life-cycle management commands to a Pentagon analyst—the same ability to track equipment and supplies worldwide, whether in transit or stationary.

core enterprises—the Assistant Secretary of the Army for Acquisition, Logistics and Technology and the commanding general of Army Materiel Command have teamed up to lead the materiel enterprise, focused on the industrial base, the materiel enterprise workforce, resource and funding priorities, and unit and equipment sustainability.

When it comes to technology, it is not business as usual as we reshape the Army. Steps we have taken include developing a low-cost, low-altitude parachute delivery system, now being used in Afghanistan to airdrop supplies into remote, hard-to-reach places, delivering supplies to where no convoy can go. The most impressive part is that the team developed it from concept to a combat capability in just 16 months. We also are examining the potential of a range of other technologies, from robotics to improved logistics command-and-control capabilities.

We will need the same kind of creative thinking to turn the Army greener, reducing the amount of energy we consume while keeping our troops safer, because every time



The Combat Logistics Patrol from the 782nd Brigade Support Battalion, 4th Brigade Combat Team, 82nd Airborne Division, traverses difficult terrain after completing a mission at the Bandar Command Observation Post, Paktika Province, Afghanistan.

Shaping Army Logistics

Five years ago, when we began transforming logistics units to a modular force, some thought it was too risky to undergo a large-scale conversion in the midst of supporting combat operations. Five years later, not only have we succeeded, but we are better able to carry out our new missions with logistics units that are now modular and scalable. And those new transformed logistics units have proven themselves in both Operations Enduring Freedom and Iraqi Freedom, performing better than we could ever have hoped.

In recognition of the need for institutional Army adaptation, we're realigning the functions and fiscal authorities of the generating and operating forces to most effectively produce trained and ready forces.

As the Army embarks on an effort to implement the enterprise approach—decentralizing decision making to four

we have to put a fuel truck on the road in combat, we put soldiers at risk.

Last year, the Army established the Senior Energy Council to plan how to reduce energy consumption and use alternative and renewable energy technologies, including harvesting wind and solar power. We're also looking at low-tech answers, with high payoffs: Just spraying insulating foam on tents in Iraq saved $2 million in energy costs per day and took 12 trucks off the road every day. We are continuing this effort in Afghanistan and are seeing similar energy-saving results.

None of this is easy, but in an era when logisticians must change faster to keep up with the churn, every bit of it is necessary. When done right, we'll provide the most efficient support we can for current and future engagements. We will be always there, always ready. ★

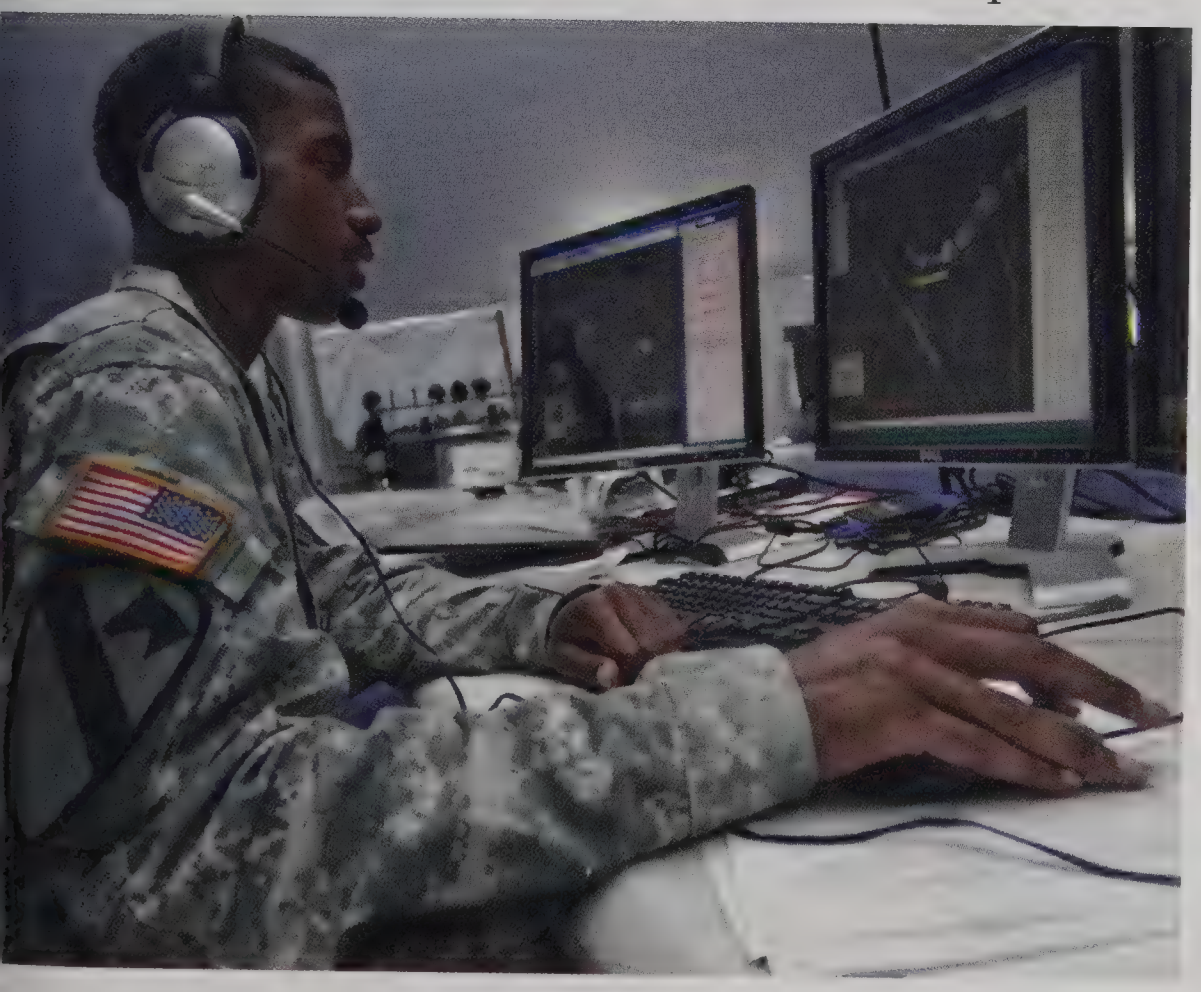
LandWarNet

Delivering the Right Information At the Right Place and Time

By LTG Jeffrey A. Sorenson
Chief Information Officer/G-6

The following maxim is not novel: The joint commander demands relevant forces. But what does that mean in today's environment? For the Army, being relevant means being expeditionary. To be expeditionary, the Army must be networked—not networked in just any old way, but networked like the Verizon Wireless commercial—"Can you hear me now?"—with a universal capability that is always available.

LandWarNet is the Army's answer to meeting the commander's requirement for expeditionary forces to conduct full spectrum operations. A combination of infrastructure and services, LandWarNet moves information through a seamless network, facilitating effective management of warfighting and business information. It enables





CPT Richard Becker, 275th Signal Company, and CPT Jason Carlile, 362nd Signal Company, network with one of several industry partners present at the LandWarNet Conference in April at Camp Stanley, South Korea.

operational forces, down to small tactical units, to "reach back" for data—including high-definition intelligence products, voice and video—and thereby creates unprecedented levels of access, flexibility and agility. With this information superiority comes decision superiority and, ultimately, full spectrum dominance.

Until recently, the LandWarNet concept was executed on an almost ad hoc basis; it was fragmented, not standardized, unsecured and expensive. In March 2009, however, the Chief of Staff of the Army approved the Global Network Enterprise Construct (GNEC) to guide further development of LandWarNet.

GNEC is best described as the focused, time-phased, resource-sensitive, Army-wide strategy to transition LandWarNet from many loosely affiliated independent networks into a truly global capability that functions as a single integrated enterprise. In response to today's operational complexity and the increasing demand by the Army and its partners to get the right information at the right place at the right time, GNEC is particularly concentrated on network access, utilization, security and control.

GNEC is multilayered, but one of its most important features is the regional network service center (NSC). NSCs will provide a global plug-and-play capability that connects Army, joint and coalition networks through all phases of joint operations. Each NSC will be composed of three major elements: fixed regional hub nodes (FRHN), area processing centers (APC), and a theater network operations and security center (TNOSC) supported by an enterprise service desk. Every NSC will provide critical communications and network operations connectivity for battle-command capabilities used by soldiers during preparation for deployment and the actual movement into an area of operations.

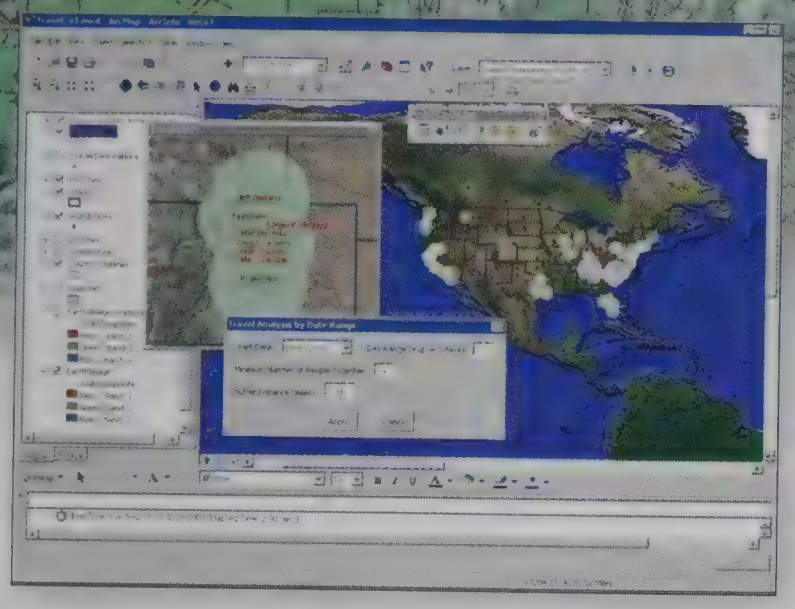
Under GNEC, a single command, Network Enterprise Technology Command/9th Signal Command (Army) (NETCOM/9th SC(A)), will manage the entire Army network. That means NETCOM/9th SC(A) is responsible for organizing Army information so that it is globally accessible, useful and secure for soldiers deployed anywhere in the world. The command will establish, operate, protect and defend the LandWarNet enterprise and will execute technical authority over the network through the Army Global Network Operations and Security Center and the regional TNOSCs.

With more than 1,000 personnel deployed in support of global cyber operations, the chief information officer (CIO)/G-6 and NETCOM/9th SC(A) are actively engaged on a daily basis in protecting Army networks from intrusions

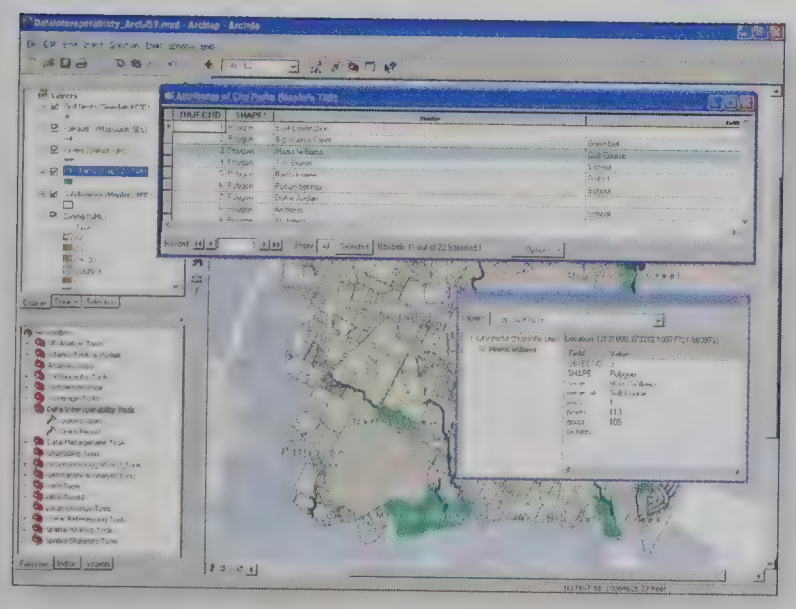


LTG Jeffrey A. Sorenson *is the Department of the Army Staff's chief information officer/G-6. Prior to his current position, he was the deputy for acquisition and systems management to the assistant secretary of the Army (acquisition, logistics and technology). Upon his graduation from the U.S. Military Academy, LTG Sorenson was commissioned as a second lieutenant in Field Artillery, serving in tactical units at III Corps artillery and in Germany. Following his transfer into the Military Intelligence Corps, he served as the division artillery intelligence officer and completed several assignments at the division staff and operational level. He has more than 20 years of acquisition experience as a certified U.S. Army material acquisition manager. His acquisition assignments include: director, program control (Joint Tactical Fusion Program Office); course director for the executive program managers course (Defense Systems Management College); director, science and technology integration (Office of the Assistant Secretary of the Army for Research and Development); product manager for ground based common sensor-light Teammate Trackwolf programs; project manager for night vision/reconnaissance, surveillance and target acquisition; director, Acquisition Directorate (Office of the Director of Information Systems for Command, Control, Communications and Computers); senior military assistant for the Under Secretary of Defense for Acquisition, Technology and Logistics; and the program executive officer for tactical missiles. LTG Sorenson earned an MBA from Northwestern University, majoring in finance, accounting and decision sciences. He is a graduate of the program manager and executive program managers courses at the Defense System Management College, the Armed Forces Staff College and the Army War College.*

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- Enterprise applications such as SAS, Oracle, SAP, IBI, and FileNET
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LTG Jeffrey A. Sorenson, the Army's chief information officer/G-6, answers a question following a panel discussion, "Transforming LandWarNet for the Warfighter," at the Association of the U.S. Army's 2008 Annual Meeting and Exposition.

The CIO/G-6, in coordination with NETCOM/9th SC(A), is improving information assurance training conducted at the command level. Every soldier must learn that the network is a weapon system, and each soldier's success depends upon the network being secure as well as operational.

While GNEC aims to accomplish an incredible amount, the strategy does not ignore the fact that the Army is entering a period of fiscal constraint. It will force financial transparency and consolidation of information technology (IT) procurement. The Army will identify and eliminate redundant and inefficient nonenterprise services. New network operation tools, which will be fielded soon, will improve visibility of Army IT assets and will help with capital planning and development of modernization strategies that assess compliance and enable more effective network operations. Any savings achieved will be used for future investments.

GNEC implementation, which will take three years, is already under way. Since March, the Army has transformed IT governance, establishing a multitiered framework that facilitates integration of the enterprise capability-set construct and synchronizes IT improvements with the Army force generation process. This change will ensure that soldiers deploy with functionally optimized battle-command capabilities, given financial constraints. The revised governance structure also features two new boards: the Engineering Review Board, which reviews technical aspects of the network, in particular enterprise architecture, to improve interoperability; and the Operations Oversight Board, which oversees how we support the warfighter and determines what must be done differently to improve the tactics, techniques and procedures for delivering the network to deployed forces.



A Warfighter Information Network-Tactical Increment 2 test vehicle awaits movement instruction during the WIN-T technology demonstration at Naval Air Engineering Station in Lakehurst, N.J., last November.

Another major organizational change accomplished this past year was the transfer of director of information management (DOIM) oversight for network and network service functions from the Installation Management Command to NETCOM/9th SC(A). Under this reorganization, NETCOM/9th SC(A) is now responsible for consolidating Army networks in the continental United States, with a goal of reducing the number of entry points into the enterprise network and thereby increasing security. The DOIMs have been renamed and are now known as network enterprise centers.

To provide better situational awareness and to improve communications capability, the Army is pursuing investment in its tactical infrastructure. The Warfighter Information Network-Tactical, the joint tactical radio system and satellite communications systems will further enhance the integration, mobility and capacity of LandWarNet and will give commanders the critical tools required to extend the network down to the individual soldier. As a part of improving connectivity to the network, the installation information infrastructure-modernization program continues to upgrade installation infrastructure; the ultimate objective is to make Army installations like docking

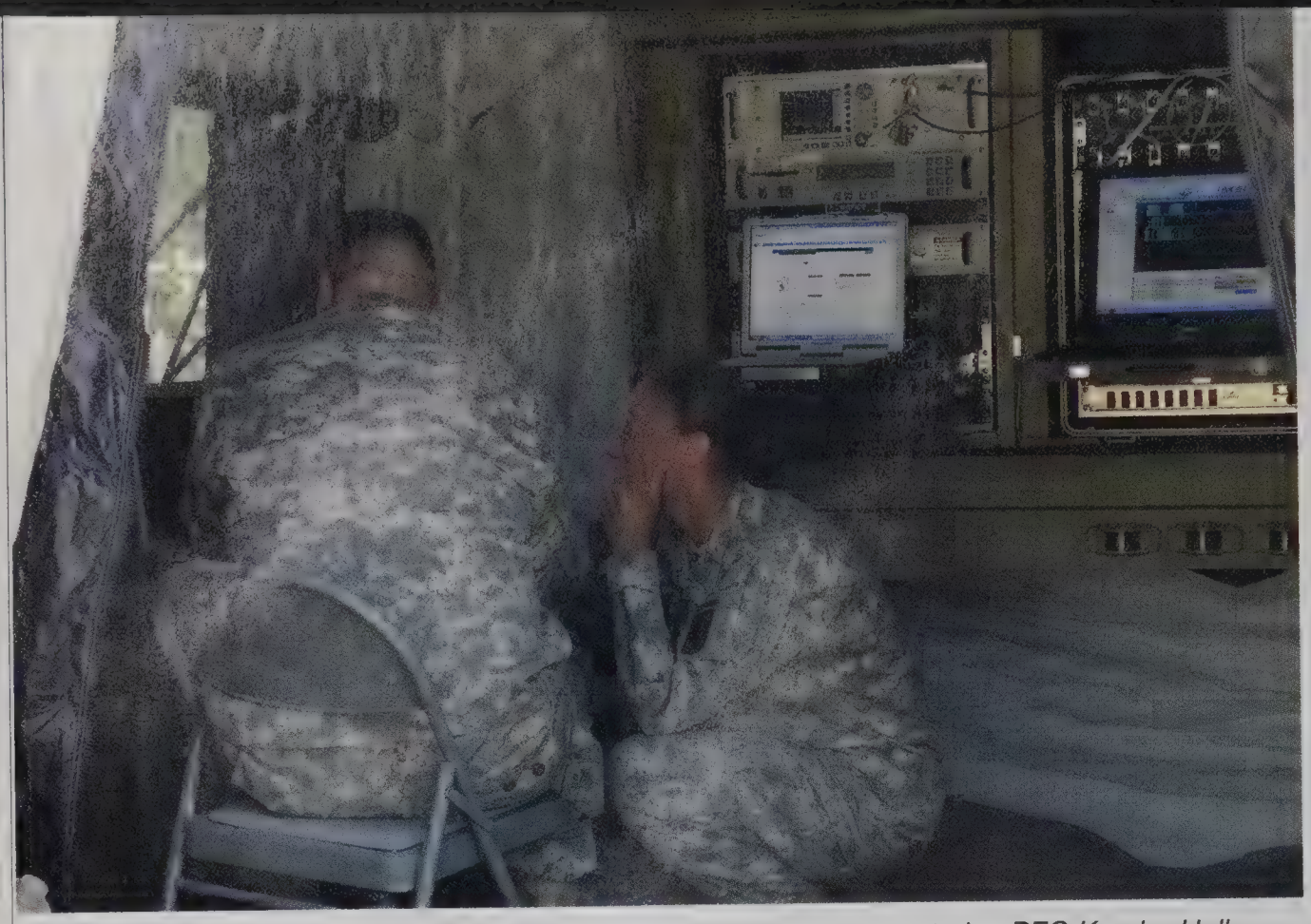
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SPC Matthew Settern, 206th Signal Company, cross-trains PFC Kendra Hall during a network service center operational validation at Fort Bragg, N.C. The validation is part of an effort to enhance the ability of all Army units to update and retain warfighting data as they travel from one location to another.

stations, enabling soldiers to train the way they will fight, with the same identity, equipment and capabilities as will be used during operational deployments.

In addition, within the G-3/5/7 an Army cyber task force was established to synchronize all Headquarters, Department of the Army (HQDA) cyber functions. The task force is composed of personnel from staff elements of HQDA, NETCOM/9th SC(A) and the Intelligence and Security Command.

The Army has already tested the ability of GNEC to deliver LandWarNet to the soldier. During the May 2009 U.S. Army Europe Austere Challenge exercise, the 18th Fires Brigade from Fort Bragg, N.C., conducted a simulated deployment of a unit from the continental United States to a location outside the continental United States. During the virtual movement, the 18th Fires Brigade seamlessly transferred its information and services from Fort Bragg to the deployed environment. When the unit arrived on the ground, it plugged into the network and was able to draw from the NSC in Europe everything it had drawn from the continental U.S. center. Unlike today, when units conducting an overseas deployment must operate on different networks and with different applications, this unit did not have to change any of its operating procedures or applications.

The Army expects to make further progress in implementing GNEC in fiscal year 2010. NSC capabilities will be established for the Southwest Asia theater and expanded in the continental United States with the construction of two FRHNs and greater use of APCs. (The Army intends to have five NSCs by 2011.) In addition, the battle-command server environment will be redesigned to support GNEC implementation at both the enterprise and tactical levels.

Due to LandWarNet's size and scale, the Army must employ a more efficient data strategy that maximizes opportunities for knowledge transfer and security. That strategy must encompass management of virtual data, enterprise architectures and storage so that information is always visible, accessible, understandable, trusted and traceable by the Army *and* partnering warfighting, intelligence and business communities. To that end, in 2010 the Army will deploy more network operation tools that provide better visibility of the network: We will know what's on it from a security standpoint, and we will be able to control that traffic.

More broadly, the CIO/G-6 chief data officer (CDO) organization, which was established in 2009, will define policies to strengthen data-management processes to ensure that information is derived from authoritative sources. The CDO initiated this mission by tackling a very sensitive and important challenge for the Army: suicide prevention. Data relevant to this issue were held by the personnel, legal and medical communities. Each maintained an independent database that did not interoperate with the others; yet to understand fully how to prevent suicide, the information within those databases had to be exposed to all the communities. The CDO developed a strategy for unveiling the needed data regarding suicide, and through this information the Army finally began to understand the nuances of the problem and to craft a comprehensive and effective plan. This project will serve as a model for future efforts to mine, share and understand data across and within disparate communities.

In addition, the Army is leading a project with the Defense Information Systems Agency and the Transportation Command to field a secure enterprise-managed service for e-mail. If successful, the system may be adopted by the entire Defense Department.

The next several years almost certainly will present constant change—operationally and fiscally—for the Army. Creation of a unified enterprise information environment—with standard infrastructures, common policies and the ability to provide information services from the generating force to the tactical edge—is essential. GNEC and LandWarNet are the means to that end; they will keep the Army relevant in joint force operations. Much work remains to be done, and providing the best network capability available to soldiers is not a task the Army can accomplish on its own. Active support from the Office of the Secretary of Defense, Congress and industry is required. The entire CIO/G-6 team looks forward to working with these partners to ensure that we set the conditions for soldiers to achieve success. We are steadfastly committed to ensuring that our warfighters have everything they need to protect the nation and to return home after a job well done. ★

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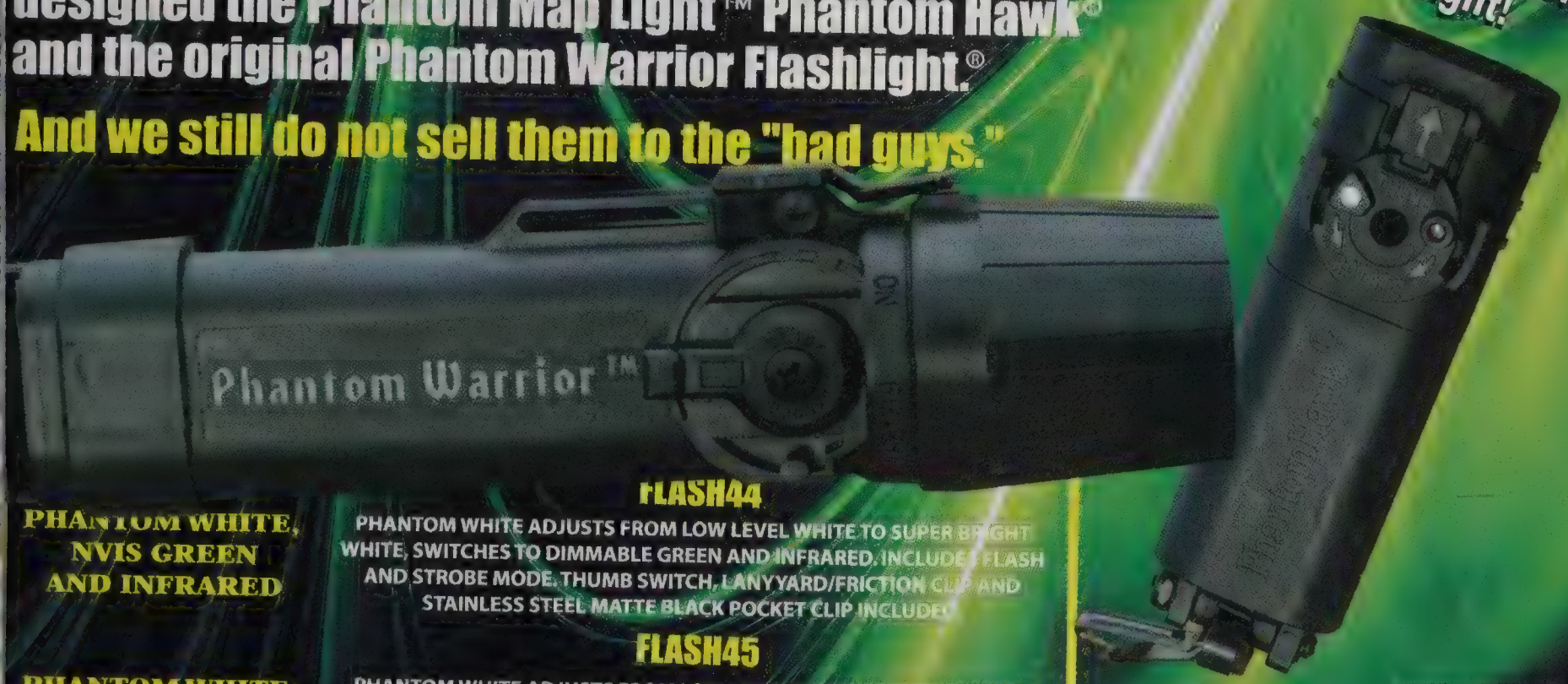
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FLASH41

PHANTOM WHITE ADJUSTS FROM LOW LEVEL WHITE TO SUPER BRIGHT WHITE, SWITCHES TO DIMMABLE RED AND INFRARED. INCLUDES FLASH AND STROBE MODE. THUMB SWITCH, LANYARD/FRICTION CLIP AND STAINLESS STEEL STEEL MATTE BLACK POCKET CLIP INCLUDED.

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New Priorities For an Engaged Army

By LTG Stephen M. Speakes
Deputy Chief of Staff, G-8

The Army is in the midst of a significant realignment of U.S. defense and national priorities, given finite national resources in an era of persistent conflict. Two wars, a military-readiness dilemma, equipment shortages, a new defense acquisition process and new fiscal realities combined with a domestic economic crisis are forcing the Obama administration and the Department of Defense to make difficult trade-offs regarding the military forces and their roles in implementing the national security strategy. In addition, DoD's strategy to allocate more resources to fight insurgency will have a significant impact on current and future Army force structure, personnel, procurement and modernization options.



The demand for land forces is not anticipated to decrease in the imme-



SGT Curtis Ralyea, assigned to the Kapisa-Parwan Provincial Reconstruction Team, provides security during a reconnaissance mission in eastern Afghanistan's Kapisa Province in August.

diate future; landpower will remain an essential element of the national security strategy. Moreover, a strategic environment of persistent conflict requires continuous and adaptive modernization to stay ahead of innovative enemies whose asymmetric attacks have demonstrated their adaptive abilities. As a nation, we must balance operational and strategic priorities to ensure that our military forces accomplish their current missions while also preparing for future contingencies. America's Army of the 21st century requires a versatile mix of tailorable organizations, operating on a rotational cycle, to provide a sustained flow of trained and ready forces for full spectrum operations and to hedge against unexpected contingencies at a tempo sustainable for our all-volunteer force. Lessons learned in Iraq and Afghanistan have taught us that our ability to control land, influence populations and deter America's enemies constitutes the central core of an effective security strategy.

After more than seven years of continuous combat operations on two vastly different battlefields, the Army is out of balance in terms of people, resources and equipment. America's Army is attempting to meet the needs of the current fight while also sustaining the all-volunteer force, restoring our strategic flexibility and attaining full spectrum readiness. Operations in Afghanistan and Iraq highlight the rapidly changing threat environments. Some would argue that the United States can afford to focus on counterinsurgency missions and minimize or exclude preparedness for other forms of conflict. We believe that this argument is wrong and that our Army must continue to develop multipurpose units capable of operating with tailoring across the spectrum of conflict. As the Army reduces its commitment to Iraq and stabilizes the force levels it supplies to Afghanistan, the goal is to restore the nondeployed forces to full spectrum readiness over time. This will enable the Army to be prepared to respond to whatever the next mission is. We know from history that we cannot predict the next crisis or its form of conflict, but we can best protect the United States by providing flexible and ready formations.

In order to restore balance and transform the Army into a truly versatile force, the Army Chief of Staff (CSA) has outlined four imperatives.

- Sustain our soldiers and families.
- Prepare our soldiers for success in current operations.
- Reset soldiers and units effectively upon redeployment.
- Transform the Army to meet diverse challenges across the entire spectrum of 21st-century conflict.

These imperatives are the foundation of our plan to achieve balance by 2011.



LTG Stephen M. Speakes *is deputy chief of staff, G-8. His previous assignment was director, Force Development, Office of the Deputy Chief of Staff, G-8. He also served as commander, Company M, 3rd Squadron, 3rd Armored Cavalry Regiment, Fort Bliss, Texas; commander, 2nd Squadron, 11th Armored Cavalry Regiment, V Corps, U.S. Army Europe and Seventh Army, Germany; commander, 2nd Brigade, 1st Cavalry Division, Fort Hood, Texas; chief of staff/deputy commander, Seventh Army Training Center, U.S. Army Europe and Seventh Army, Germany; assistant chief of staff, G-3 (Operations), then chief of staff, V Corps, U.S. Army Europe and Seventh Army; assistant deputy chief of staff for Operations and Readiness, U.S. Army Forces Command, Fort McPherson, Ga.; chief of staff, III Corps and Fort Hood; assistant division commander (Support), 4th Infantry Division (Mechanized), Fort Hood; and deputy commanding general (Operations), Third U.S. Army, Fort McPherson, including duty as deputy commanding general (Operations), Coalition Forces Land Component Command and Operation Iraqi Freedom, Kuwait. A graduate of the U.S. Military Academy at West Point, he has a master's degree in government from Georgetown University.*

Sustaining our soldiers and Army families is the top priority and represents a critical and substantial portion of the Army's base budget. The administration's plans to deploy additional U.S. troops to Afghanistan while simultaneously maintaining substantial troop levels in Iraq will continue to impose high levels of stress on soldiers and the Army family. The Army recognizes this and has taken steps to increase support to soldiers and their families, understanding their importance in maintaining overall readiness. The Army has nearly doubled funding to family programs over the last two years, demonstrating our commitment to improve their quality of life. While we have made great strides in quality-of-life programs since 9/11, we still have more to do. Our ability to sustain this commitment in the face of increasingly constrained resources is a key challenge.

To prepare our soldiers for success in current operations, the Army fielded nearly 10,000 mine resistant ambush protected (MRAP) vehicles to Iraq and Afghanistan, which greatly enhanced soldier survivability. By the end of the calendar year, the Army expects to field the latest variant of MRAP—the MRAP all-terrain vehicle (ATV) or M-ATV—to our forces in Afghanistan. This new program is an example of our commitment to relentlessly adapt to the needs of war as they change. The Army is also moving aggressively to develop a new ground combat vehicle that will be fielded in the next five to seven years to fill our need to replace Cold War-era ground vehicles. We are moving forward with our analyses of wartime lessons learned and applying the technology derived from the manned ground combat vehicle portion of the former Future Combat Systems program to enable the Army to field a new vehicle that will meet the needs of today's and tomorrow's operational environment. Our intent is to take a fresh look at requirements for an Army ground combat vehicle that provides the capabilities and technologies that our soldiers need and deserve.

Reset is a priority for the Army to focus the unit on recovery from deployment and set the conditions for successful future missions. The CSA's reset document guides our approach. The Army has established a six-month process for the active component and a one-year process for reserve components to systematically restore deployed units to a level of personnel and equipment readiness that permits the resumption of training for future missions. The Army is revitalizing soldiers and families; repairing, replacing and recapitalizing equipment; and retraining soldiers. Reset is holistic—it focuses on the soldier, the Army family, units and equipment. By continuing to develop this process, the Army will uphold its commitment to the soldier and the Army family—the core of the world's dominant fighting force.

As the Army transforms into the Future Force, its modernization strategy provides the foundation for adaptive modernization. The strategy focuses on fielding spin outs to every brigade combat team (BCT), incorporating the MRAP into our formations, building the most important element of BCT modernization—the network—on an incremental basis and developing the ground combat vehicle. The modernization strategy focuses on building a versatile mix of networked BCTs and enablers to use mobility, protection, information, precision intelligence and fires to conduct effective full spectrum operations.

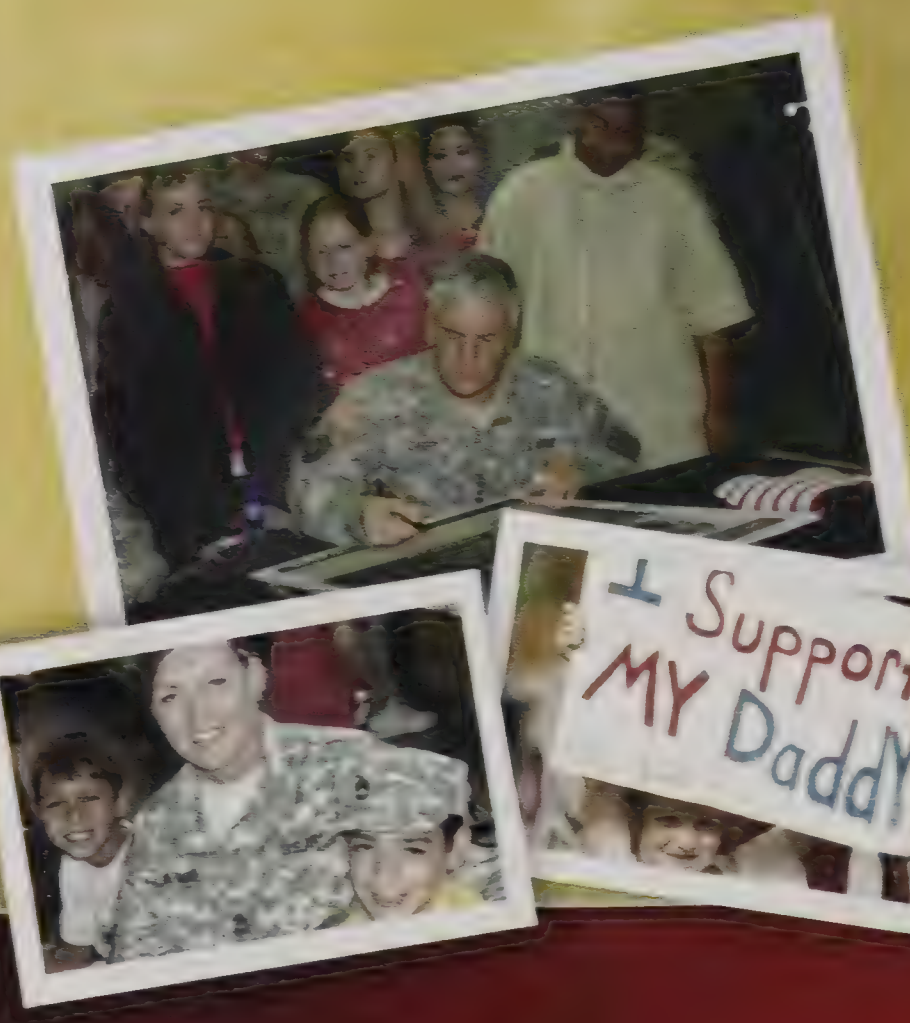
We have begun a withdrawal of equipment and personnel from Iraq. This sets the conditions for an effective transfer of much needed equipment from Iraq to Afghanistan. Our intention is to manage this process carefully to meet current needs while also beginning to rebuild the Army's strategic readiness in preparation for unexpected contingencies.

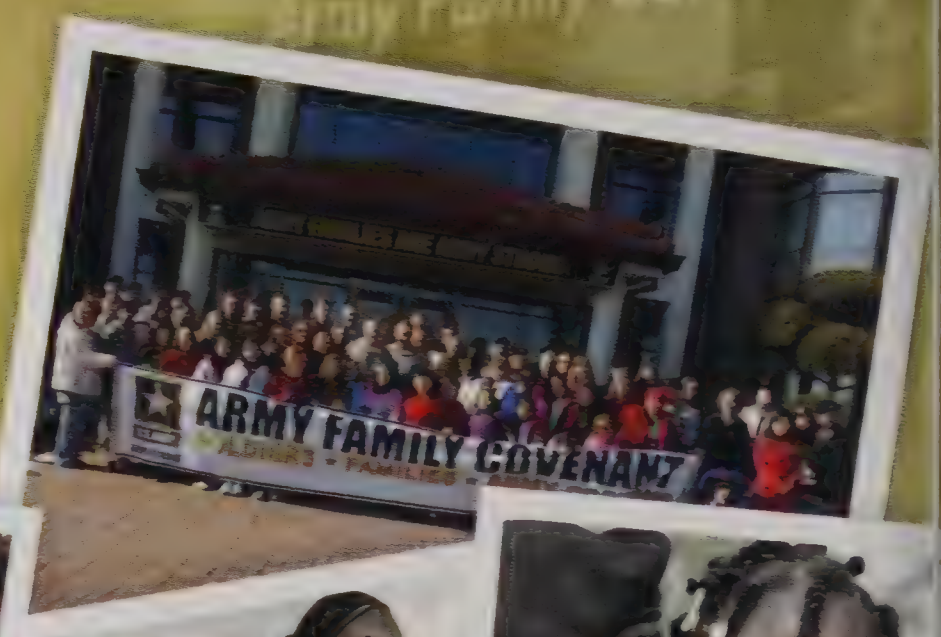
In summary, success equals a balanced force with full spectrum readiness. The Army will achieve this end state if it is properly supported and given the resources it needs. Those resources must maintain the programs that support soldiers and families, execute successful reset while we withdraw from Iraq and meet new national priorities in Afghanistan as the Army prepares for the future. The Army will do this by building readiness in its formations and executing the Army modernization strategy to build flexible, agile, deployable and sustainable formations. ★



Searching for emplaced improvised explosive devices north of Baghdad, operators of a Buffalo version mine resistant ambush protected vehicle use the bottom prong of its hydraulic arm to dig through suspicious areas while on route clearance missions.

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The Human Dimension Of Army Force Generation

"The human dimension of readiness is about resilience."

—Military Family Research Institute

By LTG Robert Wilson
Assistant Chief of Staff for Installation Management and Commanding General, Installation Management Command

LTG Eric B. Schoomaker, Commanding General, U.S. Army Medical Command and the Surgeon General of the Army, and **Chaplain (MG) Douglas L. Carver**, Chief of Chaplains, contributed to this article.

Our Army faces unprecedented challenges as it prosecutes the longest conflict fought by an all-volunteer force. Soldiers and families have shown tremendous resilience during seven years of war.

The psychological consequences of persistent conflict on soldiers and families manifest in human behavior that could affect the all-volunteer force. Fortunately, strong relationships between individuals, families, command units and communities promote resiliency and mitigate the daily, chronic and traumatic stressors from persistent conflict. An enterprise approach to develop soldier and family resil-





Family and Morale, Welfare and Recreation patrons work out on free weights following the grand reopening of the U.S. Army Garrison (USAG) Hohenfels, Germany, post gym in May. With funding from Installation Management Command, USAG Hohenfels now has one comprehensive workout facility with renovated locker rooms.

iency is essential to military readiness. Efforts are under way to coordinate, synchronize, optimize—to integrate efforts across Army Staff offices, agencies and Army commands—and ensure the ideal building of resiliency programs and support for resilience within the Army community.

U.S. Army Training and Doctrine Command's (TRADOC) pamphlet (525-3-7-01) *The U.S. Army Study of the Human Dimension in the Future 2015–2024* outlines the future operational environment and its effect on moral, physical and cognitive components of the human dimension. It addresses the effects of stress, human capital strategies, science and technology, and leadership on the human dimension in full spectrum operations.



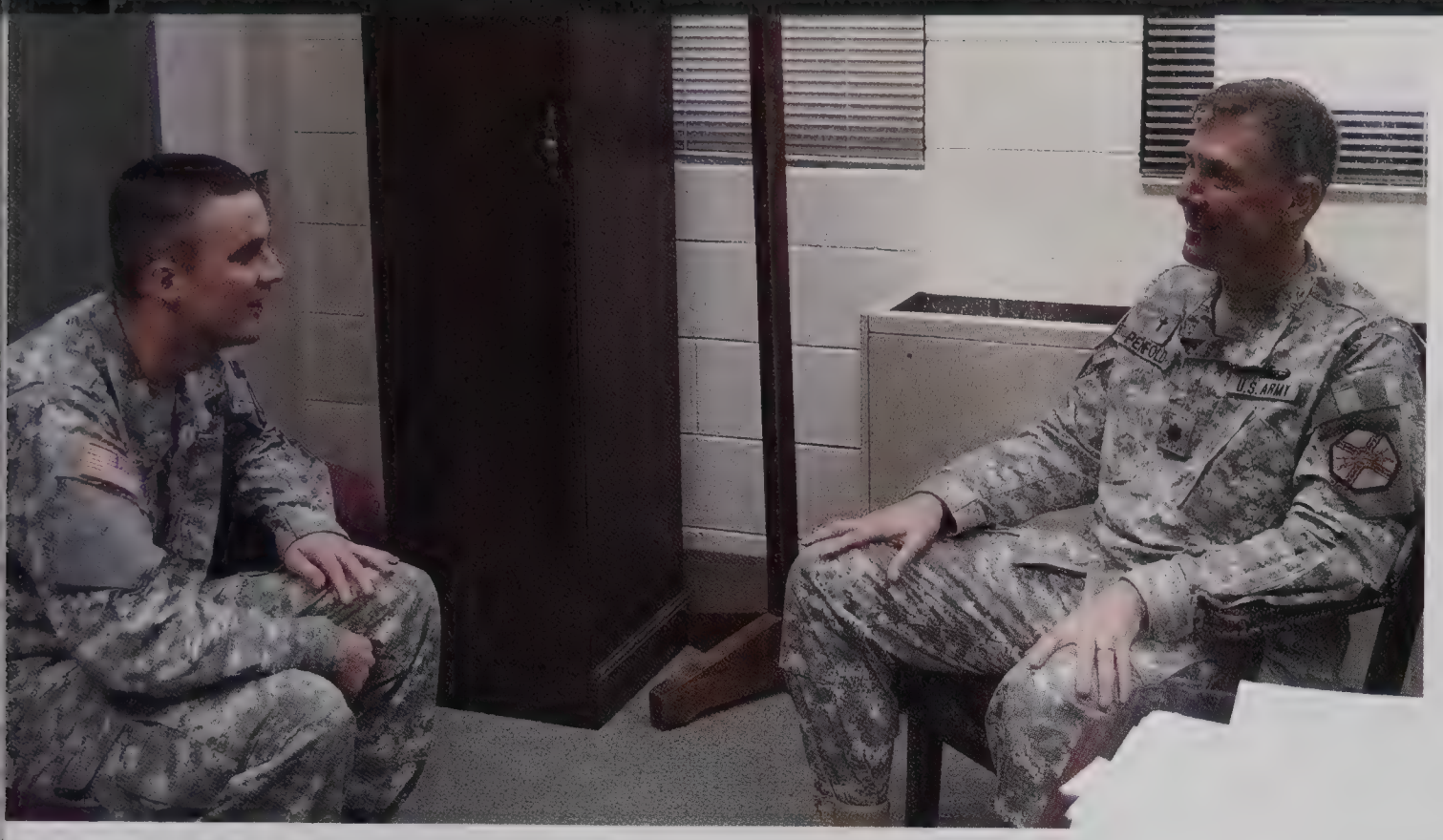
LTG Robert Wilson *is the assistant chief of staff for Installation Management and commanding general of the Installation Management Command. He previously served as assistant deputy chief of staff, G-3/5/7. LTG Wilson's assignments include commander, Company C, 3rd Battalion, 67th Armor, 2nd Armored Division, Fort Hood, Texas; commander, 1st Squadron, 4th Cavalry, 1st Infantry Division, Fort Riley, Kan., and Saudi Arabia during Operations Desert Shield and Desert Storm; commander, 3rd Armored Cavalry Regiment, Fort Bliss, Texas, and Fort Carson, Colo.; deputy commanding general and assistant commandant, U.S. Army Armor Center and Fort Knox, Ky.; deputy commanding general (West), U.S. Army Recruiting Command, Fort Knox; chief, Office of Military Cooperation, American Embassy, Cairo, Egypt; and commanding general, 7th Infantry Division and Fort Carson. He holds a master's degree from Central Michigan University and is a graduate of the U.S. Army Command and General Staff College and the U.S. Army War College.*

The human dimension of Army force generation (ARFORGEN) is complementary to the TRADOC concept, offering a holistic perspective of how soldiers and families are affected by and respond to an Army at war. Addressed are the challenges faced in current operations. Heretofore ARFORGEN's focus has been on the preparation, deployment and restoration of units, especially the aspects of staffing, equipping and training. But there is a growing realization that the human dimension of ARFORGEN rests within the highly individuated capacity of soldiers and their families to meet the iterative challenges of ARFORGEN—challenges that are not necessarily best captured within the boundaries or major processes outlined in the ARFORGEN model. We must restore the resiliency of soldiers and families with the same rigor that we apply to unit readiness through the ARFORGEN model.

Like ARFORGEN itself, the human dimension of the ARFORGEN framework is cyclically recurrent, characterized by uniquely human activities during each of three phases of ARFORGEN: preparation during *trained/ready*, continuity of support through the *available deployment/mobilization* and time-sensitive events during *dwell/reset*. During the trained/ready phase, before deployment or mobilization, the resiliency of soldiers and families is bolstered through programs and training. During deployment or mobilization, stressors that start during the earlier phases continue, requiring continuity of service to families to address specific stressors of separation. Upon reset—and especially in the early phases of dwell—the restoration of resiliency begins as soldiers reintegrate and focus on how to manage predictable symptoms related to the stresses of separation and combat when families reunite.

Preparation During Trained/Ready

War affects all soldiers. Among soldiers deployed to Iraq or Afghanistan from 2002 to 2008, combat-related stress symptoms such as sleeplessness and hypervigilance were present in 15 to 30 percent, and diagnosed behavioral health-care cases were three times higher after deployment than those diagnosed before deployment. With proper support, most soldiers demonstrate resiliency and recover from combat-related symptoms within days or months. Research indicates that 24 to 36 months of dwell time is required to reverse the cumulative effects of deployment. The human dimension framework—preparing for the psychological reactions to combat and separation from loved ones and enhancing the resiliency of soldiers and families for deployment or mobilization—is particularly important during this phase of the ARFORGEN cycle.



Chaplain Assistant SPC James Boddie (left) shares his future goals with Chaplain (LTC) Mark Penfold. LTC Penfold arrived at Fort Lee, Va., in June and immediately began to acquaint himself with the team there.

Daily life and chronic and traumatic stressors reduce sol-
er and family readiness. Education and information on
mily dynamics, parent education, available support ser-
ces, and the effects of stress and positive coping mecha-
sms improve readiness. An innovative approach to this
pport is through a military family life consultant, who
ovides problem-solving, nonmedical counseling services
r soldiers and families, working directly with Army
ommunity Service, National Guard headquarters and
rmy Reserve regional commands. The program is confi-
ntial except for mandatory state, federal and military re-
rting requirements.

Counseling of soldiers and families requires new para-
gms of cooperation among chaplains and health-care
unseling professionals. Different counseling models
ve proven to be complementary. Collaboration raises
unseling competency through shared training, continu-
g education, counseling supervision, and timely referrals
tween chaplains and medical providers.

Out of this collaborative approach have grown a number
proactive efforts, including Strong Bonds, a command-
itiated, chaplain-led and chief of chaplains-sponsored
ogram that helps soldiers and families build and main-
n strong relationships. Soldiers build readiness and re-
iency with education and skills, which are used to
engthen interpersonal relationships.

Spanning all of ARFORGEN, opportunities address sin-
-soldier, couple and family relationships. An off-site re-
at builds relationships and includes time to practice cog-
tive-behavioral skills and maximize attachment bonds.
is program was expanded to address relationship-build-
g needs in the active Army, National Guard and Army
serve.

Installation religious support and pastoral care develop re-
iency through a core-enterprise-aligned and ARFORGEN-
nched focus. Unit ministry teams assigned to battalion
el and above provide care to their units, but also work col-
oratively to achieve the broadest possible support across
installation. Family life chaplains serve as lead trainers
d advisors for the Chaplain Corps in family systems,
unseling intervention and family spiritual wellness.

Continuity of Support

Stressors beginning in the dwell phase continue through deployment or mobilization. This calls for additional support to the human dimension.

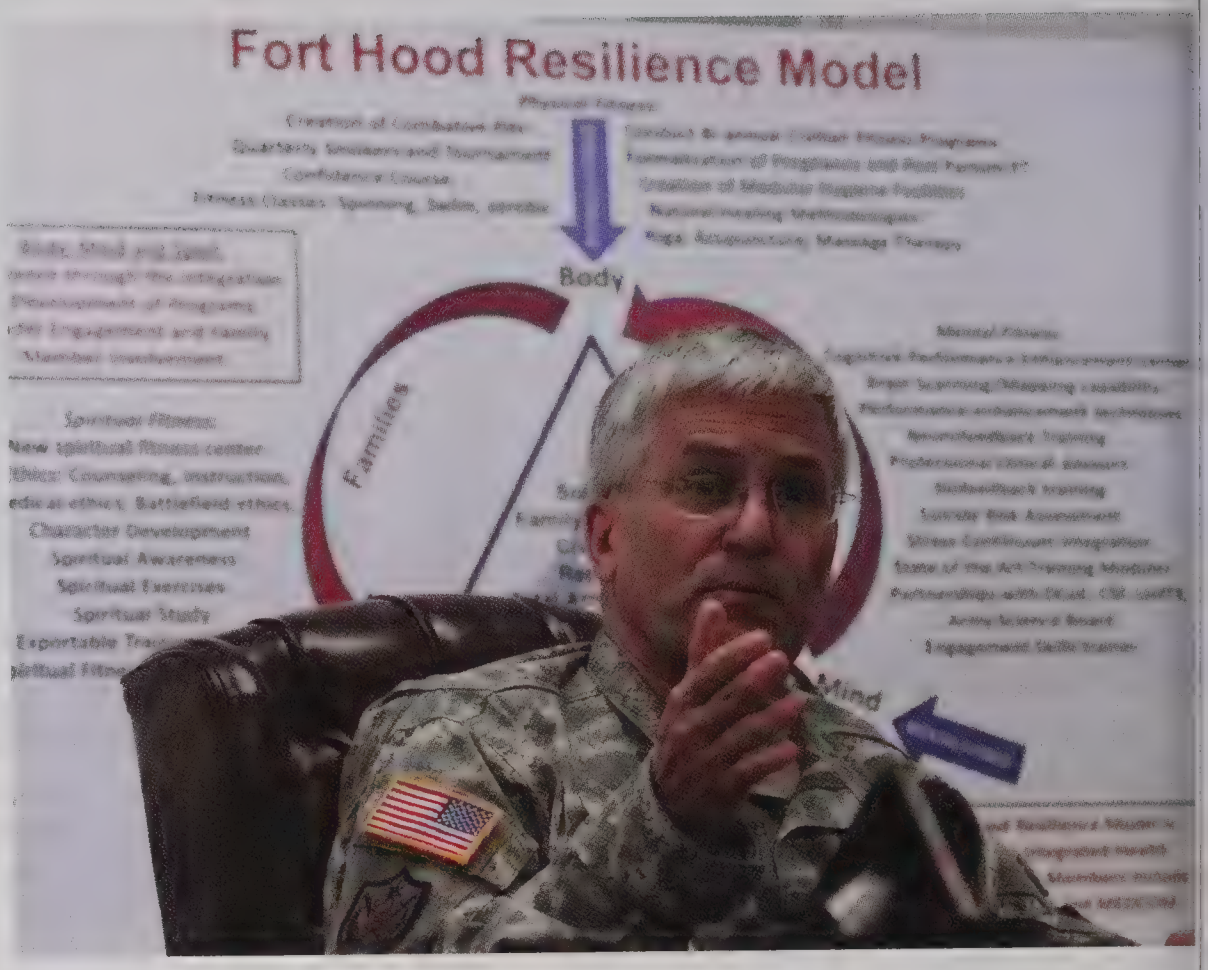
The stressors of deployment, combat, family separation and the demands of daily life frequently become spiritual stressors. Best practices from the Army's Center for Spiritual Leadership help soldiers and families build their spiritual foundations. Installation chaplain training includes spiritual resiliency, religious formation, relationship enhancement, suicide prevention and intervention, and traumatic event management.

A special element of the support provided for families is evident in the care given to the survivors of fallen soldiers. Continuity of support continues after the loss of a soldier. The Army is committed to the very best in services and support to survivors who have endured tremendous loss. Survivor outreach services build a unified program that embraces and reassures survivors that they are continually linked to the Army family for as long as they desire. Increased staffing levels at the casualty assistance centers, family programs, revised programs and policies, and standardized training for casualty assistance and notification officers ensure support to the Army family as long as the family requires it.

Reset: A Return to Dwell

A safe environment for soldiers to refresh and rebalance after returning from fighting our nation's wars is a key priority. The Army focuses on those critical needs that soldiers and families experience upon their return to dwell during reset.

As mentioned earlier, systems related to post-traumatic stress (PTS) and full-blown post-traumatic stress disorder (PTSD) behavioral health problems—such as depression, anxiety, and a tendency to seek relief through drug and alcohol abuse—affect between 15 to 30 percent of soldiers returning from Iraq or Afghanistan. Emerging studies from these conflicts indicate that the length of the deployment, frequency of deployment, dwell time, and combat frequency and intensity are the most important indicators of



Army Chief of Staff GEN George W. Casey Jr. outlines the importance of keeping resilient soldiers and families in the Army during a July press conference at Fort Hood, Texas. GEN Casey toured Fort Hood's Resiliency Campus, developed to help soldiers and families build mental, spiritual and physical fitness.

PTS reactions and PTSD. There are indicators of strain on relationships, including those within Army families. In some cases, these strains become fractured relationships and may lead to suicide; the most important factor leading to suicide is the loss of an important interpersonal relationship. Research confirms the importance of leadership and cohesion in mitigating the behavioral health impact of deployment and combat.

Stress affects soldiers returning from deployments or mobilizations, and it affects their families. Families need flexible and responsive services. New technologies, programs and services are adapted in response to fluctuating demands to ensure that families, wherever they are, have the right services at the right time. Installation Management Command—in particular, the Family and Morale, Welfare and Recreation Command—has identified programs such as virtual family readiness groups and other services that assist in mitigating the negative effects of deployments on Army families. In similar fashion, Medical Command and Army chaplains have targeted key phases within ARFORGEN that are particularly important for restoring psychological strength and have increased support to deployed and reintegrating units and soldiers during these phases.

Perceptions and stigmas remain significant barriers to behavioral health care. Returning soldiers perceive stigma differently depending on rank, job positions, exposure to peer pressure and the tone set by their leaders. Soldiers learn resiliency skills in life-cycle battlemind resilience training. This training improves resiliency, reduces stigma and improves awareness of behavioral-health issues.

Insightful leadership is our greatest strength. Numerous soldiers and leaders have confronted the stigmas of PTSD and suicide. Soldiers seek counseling to deal with the pressures of war and speak about their experiences.

Our leaders are not the only ones speaking out. Family members—through venues like the Army Family Action Plan—voice concerns and propose solutions to the Army's senior leaders. LTG Rick Lynch, commander, III Corps and Fort Hood, Texas, has taken a strong stance. Every Thursday, his soldiers go home at 3 P.M. Work hours are monitored so soldiers maximize time with their families when home from deployment. Moreover, Fort Hood has a Resiliency Campus, where soldiers go to strengthen their minds, bodies and spirits.

III Corps is making great strides in reducing the stigma associated with behavioral health care. Most importantly, Fort Hood has reduced suicides and accidents. Other senior leaders are also adjusting their programs to address the human dimension on repeated deployments.

The Way Ahead in the Human Dimension

The Army seeks to align the generating force to better support ARFORGEN by developing resiliency and reducing turbulence for soldiers and families by adapting the institutional Army to an enterprise management model.

The Services and Infrastructure Core Enterprise (SICE) is one of four core enterprises to deliver effective and efficient outcomes in support of ARFORGEN. The SICE stakeholder community includes direct reporting units and Army Staff elements that provide Headquarters, Department of the Army-level services, infrastructure and operational support.

Although much of the recent focus has been on the effects of persistent conflict on soldiers and families, SICE is also working to break new ground. Thousands of Army civilians are deployed around the globe, and the numbers are expected to grow as our civilian force becomes more expeditionary. The psychological consequences of these deployments affect civilians and their families. As a key part of the all-volunteer force, our civilians must also have their needs addressed.

SICE stakeholders find common ground in focusing on the human dimension. SICE will continue to bridge the gap between ARFORGEN and the human dimension to ensure that the generating force is better aligned to support an expeditionary army at war and our magnificent soldiers, civilians and families.



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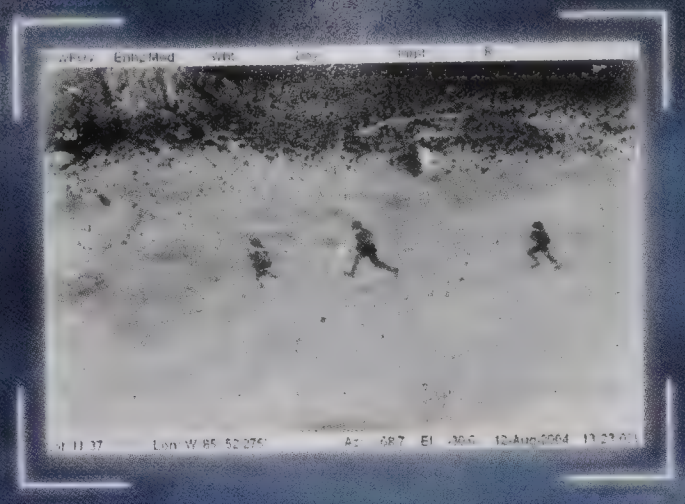
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First Army

Training for Overseas Contingency Operations While Transforming For Persistent Conflict

By LTG Thomas G. Miller
Commanding General,
First Army

Today First Army mobilizes, trains, validates and deploys all continental U.S.-based Army National Guard and U.S. Army Reserve forces mobilizing in support of operations around the world. As the executive agent for Forces Command (FORSCOM), First Army provides training to reserve components (RCs) across a broad set of unit missions ranging from Operations Iraqi Freedom and Enduring Freedom (OIF and OEF) to Kosovo, Joint Task Force-Bravo in Honduras, and the Multi-National Force and observers in Egypt.



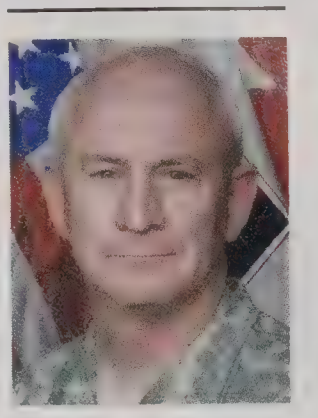
In 2009, First Army will train nearly 90,000 soldiers, sailors and airmen, organized into more than 3,000 units to meet combatant commander



Sailors in Joint Sourced Training Oversight Group 9 take defensive positions during improvised explosive device and vehicle-mounted training operations at Fort Dix, N.J. In 2009, First Army will train nearly 90,000 soldiers, sailors and airmen in more than 3,000 units.

requirements. This includes the only National Guard Stryker brigade combat team (SBCT) in the Army, the 56th SBCT; the 34th Infantry Division headquarters, currently serving in Iraq; the 48th Brigade Combat Team (BCT), currently serving as Task Force Phoenix in Afghanistan; the 30th Brigade Combat Team, a full spectrum BCT; security force and detainee operations BCTs; one combat aviation brigade; three sustainment brigades; the 143rd Expeditionary Sustainment Command, currently serving as the logistics command for OEF; and 24 provincial reconstruction teams (PRTs) consisting of multiagency and joint personnel.

First Army's two divisions—Division East at Fort Meade, Md., and Division West at Fort Hood, Texas—along with their 16 training support brigades, are composed of active duty and reserve component officers and senior noncommissioned officers with multiple combat tours. Their trainers incorporate the latest Army doctrine while collaborating with the deploying unit's leadership and subject-matter experts to develop and execute a comprehensive training plan tailored to the unit's mission. These training plans build on the unit's assessment and detail all required training events and resources needed to fully prepare for the unit's mission. This collaborative process, as outlined by the Department of the Army pre- and postmobilization training execution order, has been integral in maximizing the effectiveness of mobilization training time by developing a single, integrated training plan that enables all necessary training requirements to be validated for combat.



***LTG Thomas G. Miller** has been commanding general of First Army since January 2008.*

Our observer/controller trainers (O/CTs) remain current on the latest tactics, techniques and procedures (TTPs) from theater. First Army accomplishes this by operating an O/CT Academy at Camp Shelby, Miss., to ensure that trainers are fully qualified and current according to the latest doctrine, TTPs, training guidance and principals of training. This provides First Army with a core of highly skilled master trainers and training assistors capable of preparing units to deploy in support of theaterwide operations.

As part of this effort, First Army employs a network of liaison officers within key headquarters in the various theaters of operations. These officers continuously collect the most current TTPs for training and operations and disseminate them back to the O/CTs at the mobilization training centers (MTCs) for use in their training scenarios.

First Army works closely with the Joint Improvised Explosive Device Defeat Organization on counter-improvised explosive devices (C-IEDs) for expert assistance and equipment to enable soldiers, leaders and units to receive the highest quality training on improvised explosive device-defeat (IED-D) tasks at all MTCs. This partnership enables soldiers, leaders and units to develop expertise on critical IED-D skills.

In addition, to improve our trainers' expertise we have established an improvised explosive device (IED) master trainer course that provides the basic and intermediate skills required to successfully train soldiers on IED-D measures. First Army also embeds IED master trainers with Task Forces Troy and Paladin in Iraq and Afghanistan to gain current, hands-on expertise in counter-IED and route-clearance techniques. Our trainers then return to First Army's MTC

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and transfer their knowledge on the latest TTPs in these respective areas to deploying units. The end state is that deploying soldiers are properly trained, competent and confident in the latest C-IED tactics, techniques and procedures and route-clearance equipment and procedures.

To develop a synchronized training effort, First Army directs training missions to the MTCs with mission-specific resources and expertise. First Army's Division East and Division West work to integrate valuable support from organizations in and outside the Army.

An example of this is the 34th Infantry Division's recent mobilization, an integrated training effort led by First Army. The 34th trained for its mission at Fort Lewis, Wash., and participated in Unified Endeavor as a culminating training event. Experts from the 75th Battle Command Training Division, the Battle Command Training Program (BCTP) and the deployed 10th Mountain Division, and First Army Division West trainers teamed to provide comprehensive training focused on the current conditions in theater.

One of the more complex missions for First Army is to train reserve component aviation units. The 166th Aviation Brigade from First Army's Division West leads this collaborative effort by conducting live-fire exercises from aircraft, conducting personnel recovery lane training for pilots and subjecting aircrews to environmental training (mountain or desert), requiring the coordination and synchronization of both ground and air support assets.

First Army's Division East provides provincial reconstruction team training at Camp Atterbury, Ind. Working with the Department of State and the U.S. Agency for International Development, trainers integrate and organize airmen, sailors, soldiers and government personnel into a comprehensive training plan that encompasses a multitude of cultures and environments requiring a high level of specific cultural and military training to be successful. This approach to training is critical: PRT members meet during training as a group of individuals with diverse backgrounds and subsequently deploy as a cohesive unit trained to accomplish their mission.

A large part of First Army's training support mission is to provide training support and validation for Army National Guard BCTs with security force missions in Iraq and Kuwait. Approximately every nine months, First Army trains three security force BCTs to secure bases and movements for OIF. Most of these brigades conduct predeployment training at Camp Shelby.

First Army has also established a collaborative approach to training sustainment units to achieve the mission-focused training needed. In 2009, First Army designated one training support brigade with the responsibility for executing sustainment unit training, enabling this commander and his staff to become familiar with the specific training needs associated with modular sustainment units. To maximize training resources and expertise, Division West worked to integrate units as training audiences into Unified Endeavor in January. In July, Division West orchestrated a BCTP lead "stand-alone" sustainment unit culminating-training event for three brigades as a FORSCOM proof-of-principle as the future of sustainment unit mission validation.



SSG Alberto Mantilla, an observer/controller with 3rd Battalion, 338th Infantry Regiment, explains to Chief (SEL) Robert Hunter how to un-jam an M-249 squad automatic weapon, light machine gun at Contingency Operating Location Warrior, Camp Atterbury Joint Maneuver Training Center, Ind.


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② Sensing & Surveillance



Counter Improvised Explosive Devices

ITT continuously improves its sensing and surveillance technology to outfit Warfighters with the lifesaving tools needed to successfully complete their missions. Our night vision systems enable soldiers and pilots to "own the night," and our information and electronic warfare (EW) technologies give aircrews a combat edge.

Our radar landing systems help soldiers land in challenging and severe weather environments. Our sensing, monitoring and mapping of chemical and biological agents help ensure our nation's security. ITT provides training for operations and maintenance personnel. ITT is there, ready to support Warfighters in harm's way every day with:

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- Advanced survivability solutions for a variety of missions, including recon, mobile strike, air support, defense, close combat, vertical envelopment, search-and-rescue and troop transport
- Combat-proven and high-performance night vision systems for nearly 50 years
- Systems on the broadest range of fixed and rotary wing aircraft, including strategic, tactical and special operations platforms
- Modular scalable EW systems tailored to customer's unique platform and mission requirements
- Integrated perimeter intrusion-detection and surveillance-security systems for securing military systems and facilities around the globe
- ALQ-211 electronic warfare countermeasures systems, which provide aircrews with multi-spectral (RF, IR and laser) situational awareness and highly accurate threat warning, sensor fusion and self-protection countermeasure capabilities
- The first sensor-fused Enhanced Night Vision Goggle combining image intensification (I2) and thermal infrared (IR) imagery for optimal situational awareness in all light levels, as well as adverse weather and battlefield obscurant conditions
- Systems integration and engineering services for the U.S. military's worldwide network of missile warning, missile defense and space surveillance systems
- Shortstop Electronic Protection System (SEPS) provides an electronic umbrella for pre-detonation of proximity fused mortar, rockets and artillery rounds
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- Advanced research and development of next-generation open architecture multi-spectral EW technologies for the asymmetric battlespace

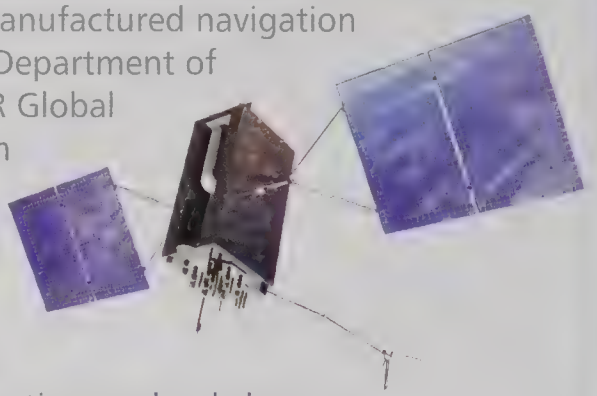


Leveraging deep knowledge of remote sensing and information handling, ITT develops and integrates sophisticated airborne capture and information management systems and capabilities for DoD, DHS and commercial customers.

③ Space

ITT provides innovative remote-sensing and navigation solutions to help our government and commercial customers visualize and understand critical events happening anywhere on earth, in the air or in space—in time to take effective action. By providing these situational awareness solutions for the combat soldier, ITT offers direct support for the Army's drive to reinvigorate the concept of combat intelligence. From image and data collection, through processing and dissemination, to launch services, ITT enables mission success.

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Image courtesy of GeoEye

Remote Sensing & Navigation Solutions

- Our commercial imaging and space science systems deliver high-resolution, high-quality imagery serving both the public and private sectors.
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- Power systems and electronic subsystem integration for avionics, command centers, communications, displays, ground vehicles, missiles, radar, space and surveillance
- Intelligence community enterprise solutions, signals intelligence products, services and analysis, information warfare solutions and advanced storage, networking and processing systems
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Engineered for life

Army Force Generation (ARFOR-GEN) and the strategic environment demand cyclical, trained and ready modular forces versus the tiered pre-mobilization readiness of the pre-9/11 Army. Under ARFORGEN, the mission of training support is to prepare units to deploy in support of operations around the world as deployment expeditionary forces (DEF) or to enter the available pool of contingency expeditionary forces (CEF). First Army has undertaken a transformation that will allow it to continue meeting the Army's training requirements while improving efficiency and effectiveness. First Army transformation consists of a new training support concept, consolidated resources and enduring infrastructure, and a reorganized training force.

Operational requirements drive ARFORGEN and subsequently both the prioritization and synchronization of training support. The ARFORGEN training support concept is focused on building collective capabilities to provide FORSCOM with units that are ready to fight and win throughout the full spectrum of operations. It optimizes training support resources through structured, sequential, progressive and prioritized application of training support over time.

The training support cycle begins when a unit is notified that it has a deployment or contingency mission (notification sourcing, or NOS) that extends through its available year. Training support is executed in three phases: training management, train and validate the force, and train to sustain.

The initial phase in the cycle is training management (NOS through alert). The key task during this phase is the development of a single, integrated training plan (DEF and CEF). During this phase, First Army brigades forge collaborative active component/reserve component functional partnerships with units and support RC unit training based on ARFORGEN priorities within capability.

The next phase, train and validate the force (alert through deploy/available), encompasses training units for the available pool. As FORSCOM's executing agent for RC training support and mobilization in the continental United States, ARFORGEN training support requires that we accomplish this task for the entire RC modular force based on cyclical provisioning of units to support operations and contingencies. As a secondary priority, we will continue to support premobilization training of the RC, providing functional assistance within our capability.

In the final phase, train to sustain (deploy/available through return to reset), First Army trainers work to extend training support through the available year. For CEF units, we will execute and support collective training events during the available year to sustain collective proficiency.



Observer/controller trainers from 2nd Battalion, 306th Field Artillery Regiment, 188th Infantry Brigade, compare notes between lane iterations at the Gunnery Live Fire Lane at Fort Stewart, Ga.

As part of First Army's transformation effort, operations and training support units will be consolidated at seven enduring mobilization training centers (eMTCs): Forts Lewis and Hood; Fort Bliss, Texas; Fort Dix, N.J.; Fort Knox, Ky.; and Camps Shelby and Atterbury. These eMTCs will concentrate their efforts on training specific mission sets required for the current fight while maintaining the ability and flexibility to support any mission that the Army or combatant commanders may require in the future.

In addition to moving units to locations where they conduct operations, First Army is reorganizing its brigades and battalions to better support a modular, brigade-centric force with joint and expeditionary capabilities. The current organizational design does not provide the versatility and agility to effectively address the evolving training support requirements. Through the lessons learned in mobilizing and training reserve component units in support of the current conflict, combined with the proven organizational design of the Army's combat training centers, First Army leaders have identified organizational amendments that will provide effective training support to the functional, modular force across the full spectrum of operations.

First Army will continue to train combat-ready forces for this era of enduring conflict, preparing both deploying and contingency forces for a broad set of missions while simultaneously transforming its training support to be more efficient and effective. The ARFORGEN training support concept optimizes resources, distributing training support at the right time and place to make the greatest contribution to unit training readiness. Versatile and agile, First Army's experienced and multicomponent team of trainers is at the center of a change in training, providing mission-tailored training to soldiers, sailors and airmen deploying around the globe. ★

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Third Army and U.S. Army Central

America's Army Downrange

By LTG William G. Webster Jr.
Commanding General,
Third Army/U.S. Army Central/
Coalition Forces Land Component
Command



Headquartered at Fort McPherson, Ga., with forward headquarters at Camp Arifjan, Kuwait, Third Army/U.S. Army Central (USARCENT) is the Army service component command (ASCC) supporting U.S. Central Command's (USCENTCOM) missions in its 20-country area of responsibility (AOR), from Kazakhstan in the north to Yemen in the south. Since its creation in 1918, the command has earned a reputation for significant contributions to national defense by demonstrating a breadth and depth of capabilities that is unmatched by any other ASCC. USARCENT provides a vital link between ground forces in the AOR and Department of the Army leadership as a direct reporting unit, and it is the nation's only forward-deployed ASCC, downrange in the decisive theater of U.S. operations.



U.S. Army Central (USARCENT) chief of staff, COL Paul J. Reoyo, speaks to students and instructors of the Kuwait Joint Command and Staff College who toured Camp Arifjan, Kuwait, last December.



CSM John D. Fourhman, USARCENT, and Lt. Col. Hussein, Supply and Coordination Staff/Senior Instructor for Peace Operations Training Center, observe a checkpoint scenario.



LTG William G. Webster Jr. *assumed command of Third Army/USARCENT, headquartered at Fort McPherson, Ga., and Camp Arifjan, Kuwait, in May 2009. LTG Webster most recently served as the deputy commander of U.S. Northern Command and commander, U.S. Army Element NORAD, from 2007–09. As the commander of the 3rd Infantry Division from 2003–06, LTG Webster redeployed the Marne Division from combat, reorganized and trained it, and deployed it to Baghdad. He commanded Multi-National Division-Baghdad's 40,000 servicemembers from 2005 to 2006. LTG Webster previously served as deputy commanding general of the Third Army and Combined Forces Land Component Command for Operation Iraqi Freedom during the buildup in Kuwait and attack into Iraq from 2002–03; deputy director of operations for U.S. Central Command in Operation Enduring Freedom; director of training, Office of the Deputy Chief of Staff, G-3, U.S. Army; and commanding general of the National Training Center at Fort Irwin, Calif.*

USARCENT executes four key tasks while remaining focused on mission, soldiers and teamwork.

Mission: Be Prepared to Fight

USARCENT's mission consists of four key tasks defined by the USCENTCOM commander: Be prepared to fight at any time in any place in the AOR and conduct full spectrum operations of limited duration as required; sustain combat troops across the AOR, especially in the combined and joint operations areas (CJOAs); build partner capacity among nations in the AOR in order to improve their ability to fight terrorists and insurgencies and to integrate their capabilities into a stronger common defense; and move to Shaw Air Force Base, S.C., in accordance with Base Realignment and Closure (BRAC) directives.

Exercises allow USARCENT to prepare and sustain its ability to deploy an early entry command post to establish a full spectrum operations-capable joint task force (JTF) headquarters. Exercise Lucky Warrior in May and June brought a new focus on humanitarian assistance and disaster relief capabilities within the command. Using real-world and exercise injects throughout the operation, USARCENT further developed its ability to bolster international goodwill in the region by considering its role as an international partner in humanitarian crises. USARCENT continually trains and prepares for future contingencies.

In addition to a broad range of activities and missions, USARCENT plans to complete the BRAC-mandated move to Shaw Air Force Base by the summer of 2011. The move will colocate U.S. Air Force Central and USARCENT, allowing for better coordination and cooperation between the two services. This will necessitate extensive, continuous planning and concurrent execution of operations in Atlanta, Ga., Kuwait and South Carolina as the BRAC completion date approaches.

Soldiers: Sustaining Combat Troops

The command's main effort remains theater sustainment and Title 10 support of land operations. As USCENTCOM's land component command, USARCENT trains, equips, feeds, supplies, maintains and assists units entering the theater of operations by way of Camps Arifjan, Buehring and Virginia in Kuwait. At Camp Buehring, commanders are offered a menu of 25 training modules that prepare units for combat and support operations. This capability provides a



SPC Scott Kuhn, broadcast journalist with the 20th Public Affairs Detachment, Fort Wainwright, Alaska, assigned to USARCENT, sets up a satellite dish at Camp Buehring, Kuwait, at the start of Lucky Warrior exercise. The communications system transmits video to the U.S. for distribution.

valuable training bridge between unit predeployment ac-
vities and in-theater training needs by offering a robust
mbined and joint reception, staging and onward move-
ent program. Camps Buehring and Virginia also support
e redeployment of units from the region.

Centrally located in the USCENTCOM area of responsibil-
, USARCENT operates the theater logistical hub that dis-
butes approximately 2.2 million gallons of fuel and serves
arly 800,000 meals daily as it provides administration, lo-
stics and training for between 130,000 and 145,000 soldiers,
ng with a civilian population of around 40,000. USAR-
NT's responsibility accounts for more than half of the
my's total deployed strength of ap-
oximately 250,000 soldiers world-
de.

USARCENT's logistical capabilities
d achievements are unparalleled by
y military or commercial organiza-
n in the world. The command's re-
rkable capacity for deployment,
ining, sustainment and redeploy-
nt is essential to the success of the
ponsible drawdown of U.S. forces
n Iraq by 2011. Between fall 2009
l summer 2010, USARCENT will
litate the closure or handover of
ndreds of military bases and camps
raq, entailing the movement, refur-
ing and possible redeployment to
hanistan of thousands of end items
millions of pieces of equipment.

Taking a leading role in support of the United States' responsible drawdown from Iraq, USARCENT is executing an impressive redeployment plan that supports the redistribution of forces in Southwest Asia and resets the Army for current and future operations. In 2008, USARCENT supported the movement of 70 brigade equivalents, a figure it is poised to exceed in 2009, with 38 brigade equivalents redeployed and reset by the end of June. Equipment requiring repair or upgrades can be handled at one of USARCENT's refurbishment program sites, and repositioning within the theater is readily facilitated at local air and sea ports of embarkation and debarkation.

Refurbishment operations in Kuwait and Qatar support light, medium and heavy assets, including line-haul trucks. This USARCENT-led refurbishment program, supported through long-standing close ties with Army Materiel Command (AMC), trims 33 percent of reset costs and saves 40 percent of the time required to ship equipment back to Europe or the United States. Kuwait's location and special-partner relationship save time and money—up to $1.15 billion in fuel and fees saved per year—and also provide our forces with exceptional access to land for training and sustainment facilities.

Teamwork: A Team of Teams

USARCENT is a team member, a team and a team of teams operating under the philosophy that a team working together and focusing on its assigned tasks can achieve anything. Supporting USCENTCOM in its 20-nation area of operations, USARCENT cooperates closely with U.S. Navy Central, U.S. Air Force Central, U.S. Marine Corps Central and U.S. Special Operations Central, seeking to increase effectiveness and build and maintain a common op-



SGT Albert Robinson, USARCENT, collections management noncommissioned officer, wears a face cover to block dust in the air at Camp Buehring in late May.

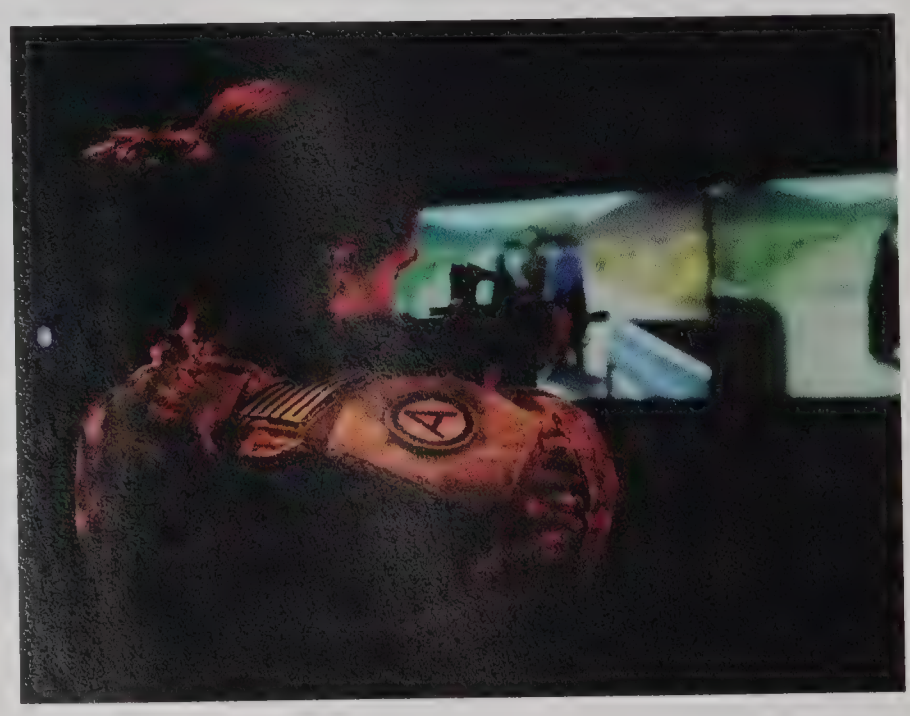


CWO Eric McKay, 2-401st Army Materiel Command, discusses up-armored Humvees with students and instructors of the Kuwait Joint Command and Staff College who visited Camp Arifjan, Kuwait.

erating picture for the combatant command commander. Command liaison activities and frequent USCENTCOM-sponsored conferences ensure cross-fertilization and mutual understanding among USCENTCOM's subordinate commands.

As a team of teams, USARCENT works closely with partner agencies such as AMC and executes operational control over more than 20 subordinate elements. The command is supported by area support groups in Kuwait and Qatar, the 4th Battlefield Coordination Detachment, a special troops battalion, and a topographical engineer detachment. Subordinate commands include the 3rd Medical Deployment Sustainment Command, controlling all medical activities in Kuwait; an aviation detachment; and signal, civil affairs, air defense and military intelligence detachments. Training at Camp Buehring is run by the 4th Training Support Battalion, and the 1st Sustainment Command (Theater) runs expeditionary sustainment command detachments in Iraq and Afghanistan as well as Task Force Sinai, the Multinational Force and Observers mission. USARCENT also supplies personnel and logistics subject-matter expertise in the CJOAs through Joint Support Element-Afghanistan and ARCENT Support Element-Iraq.

USARCENT maintains constant communications with USCENTCOM through the CENTCOM Deployment Distribution Operations Center and with U.S. Transportation Command through the Surface Deployment Distribution Command. USARCENT also maintains constant liaison with Headquarters, Department of the Army, U.S. Navy Central, JTF-Horn of Africa, Multi-National Force-Iraq, and U.S. Forces-Afghanistan.



USARCENT soldiers participate in a "shoot/don't shoot" exercise at the Engagement Skills Trainer 2000 at Camp Buehring, Kuwait, in February.

USARCENT's proximity to the Horn of Africa facilitates the establishment of an ASCC in support of land forces assigned to or controlled by U.S. Africa Command, the newest combatant command. The USARCENT team, whose AOR extends into Egypt and adjoins the new ASCC's area of responsibility, will continue to be a key supporting partner in a region challenged by the smuggling of drugs and weapons, unstable governments and the rising threat of piracy.

The command is also part of an international team that safeguards U.S. interests in the Middle East by building partner capacity among nations in its AOR to improve their ability to fight terrorist threats and insurgencies, helping them to integrate their capabilities into a stronger common defense. USARCENT leads, coordinates or participates in approximately 25 joint and combined exercises per year, 13 of which are multinational, as part of its robust program of theater security cooperation (TSC) activities, which have remained an important focus in this era of persistent conflict.

TSC activities seek to enhance stability throughout the region by promoting cross-cultural side-by-side operations, introducing soldiers to their allies' cultures, equipment, tactics, techniques and procedures. USARCENT's exercise program continually seeks to include internal, external and cooperative defense exercises with our Gulf Cooperation Council partners to help allies plan for contingencies and foster international understanding and interoperability through military-to-military cooperation. USARCENT is on the leading edge in the international effort to foster a cooperative and prosperous Southwest Asia creating a stability that will enhance the safety of host nations and safeguard U.S. and allied interests in the region.

In February and March of 2009, USARCENT conducted Exercise Friendship One, a field training exercise in which U.S. Army and Royal Saudi land forces began to develop military interoperability and lateral coordination of forces in support of theater security. In May 2009, Exercise Earnest Leader built upon the groundwork laid in Friend

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SPC Chyna Williams (left) practices gas mask clearing exercises with SSG Ria Phillips during the USARCENT Area Support Group Qatar Soldier of the Year and NCO of the Year selection process at Camp As Sayliyah, Qatar.

ip One, combining elements of the Royal Saudi air and nd defense forces for the first time. This year's exercises th Saudi Arabia were the first joint U.S.-Saudi Arabian ound-maneuver military exercises in more than 15 years. ese exercises affirm our countries' friendships and set the urse for enhanced international cooperation in Southwest ia for years to come. This month's Bright Star exercise in ypt will be the largest combined and joint exercise since 11, integrating airborne, light and mechanized forces in Sahara Desert.

Creating dialogue with allies to address common concerns team effort. As part of its continuous reassessment of the ed for land forces in modern military operations, USAR-NT hosts the Land Forces Symposium, an nual forum that brings international military ders together to discuss common challenges, hange views and foster cooperation while veloping relationships among partner na-ns. This year's symposium, Land Forces' allenges in a Full Spectrum Environment, s held in Mombasa, Kenya, drawing partner ons from around the globe. During the 2009 nposium, USARCENT continued its long ory of taking the lead, fostering mutual un-standing and increasing trust and confi-ce among nations.

Always Ready, Always Adapting

he changing face of operations requires a ible command that offers full spectrum ca-ilities. USARCENT is that organization—able of planning, resourcing, deploying, manding, repairing and redeploying nd assets in the USCENTCOM area of re-nsibility. The shifting of forces from Iraq to hanistan in coming years will require US-ENT's exceptional capabilities for rede-ment, refurbishment, repositioning, plan-ning and control, and responsible accountability of equipment and sites; functions such as environmental cleanup, reclamation of facilities, collection and repair of equipment, and proper disposal of assets are among the many tasks that USARCENT is capable of supporting and executing.

Third Army/USARCENT is prepared at all times to deploy and fight limited duration conflicts while sustaining and supporting the force in lasting conflicts. The 9/11 terrorist attacks not only brought the type of conventional conflict for which the U.S. military has always trained, but they reminded us of the need for durable, lasting relationships with our international allies and flexible command structures that meet several needs, combat and noncombat. Ready for any mission, training and equipping soldiers for their assigned tasks, and using teamwork to ensure success, USARCENT will continue to build the capabilities of existing coalitions as well as to seek new allies as we move further into the new century, always preparing and always ready for whatever lies ahead. Patton's Own! ★



CPL Timothy Chatlos, broadcast journalist with the 20th Public Affairs Detachment, Fort Wainwright, assigned to USARCENT, prepares his camera for a video shoot. The video was used as part of USARCENT's 90th anniversary celebration.

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(U.S. Army photo by Staff Sgt. Russell Lee Klika) (www.army.mil)

U.S. Army North

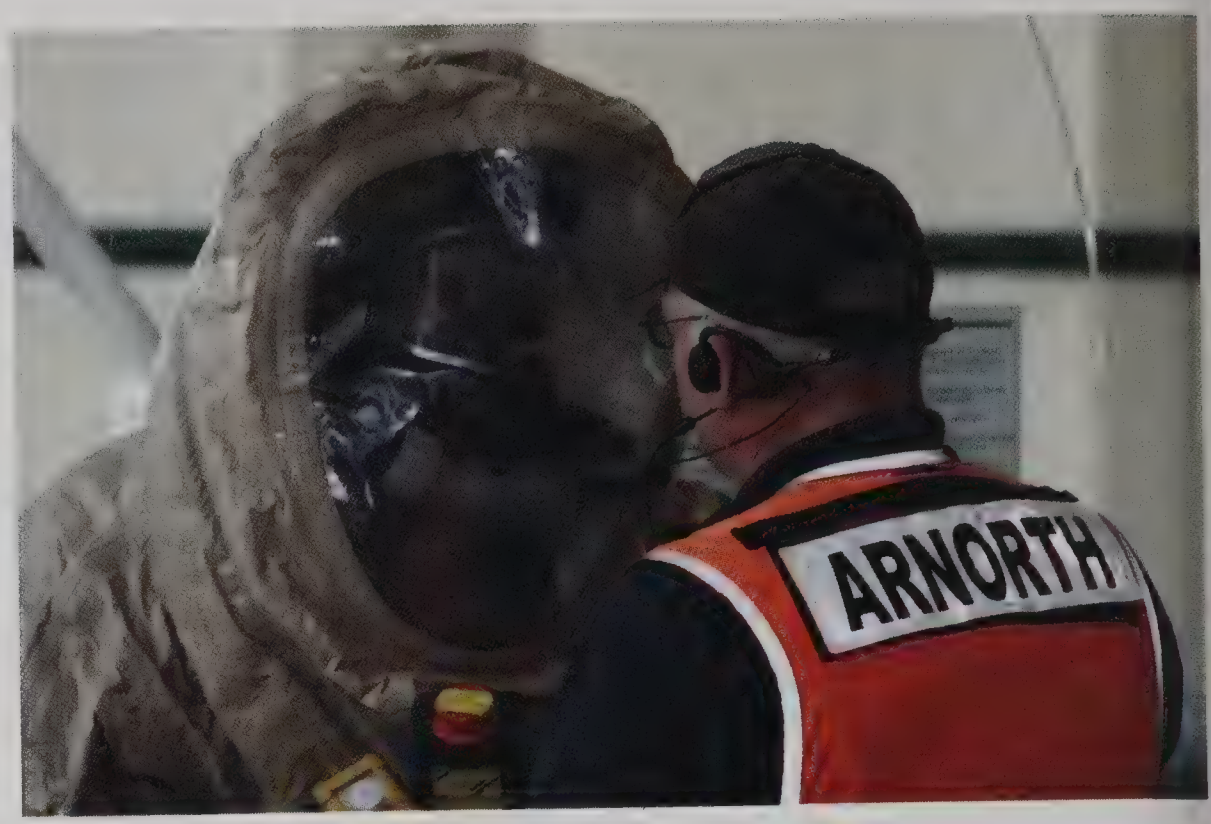
Ready to Defend, Protect and Secure

By LTG Thomas R. Turner II
Commanding General,
U.S. Army North (Fifth Army)

As the Army aims to restore balance, U.S. Army North (USARNORTH), the Army service component command (ASCC) and standing joint force land component command (JFLCC) to U.S. Northern Command (USNORTHCOM), continues to coordinate and conduct homeland defense, civil support operations and theater security cooperation activities to protect the American people and our way of life.

We provide federal military support to civil authorities when directed by the President or Secretary of Defense through our 10 defense coordinating officers (DCO) and their defense coordinating element (DCE), a nine-person team of highly trained soldiers and Army civilians that is specially equipped for rapid deployment. A





Members of U.S. Army North's Civil Support Training Activity travel throughout the country to provide chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) training. The Activity supports the training of CBRNE consequence-management response forces.

defense coordinating element is stationed in each of the 10 Federal Emergency Management Agency (FEMA) regions. The team works 24/7 with state and federal partners to plan and prepare for potential disasters.

Although the DCO/E is capable of commanding and controlling Title 10 forces, it can quickly be overextended. To that end, the command maintains two rapidly deployable operational command posts (OCP) prepared to command and control requested Title 10 forces in support of the primary federal agency. Typically the OCP will be deployed if the anticipated Title 10 support appears to be battalion size or greater.

Both organizations, DCO/E and OCP, were seriously tested in the summer and fall of 2008. Five hurricanes (including Gustav and Ike), two tropical storms, two large wildland fires in California and two floods (in the Midwest and in Presidio, Texas) kept everyone busy. Both DCO/E and OCP deployed multiple times in anticipation of requests from states for federal assistance and potential requirements for DoD Title 10 support.

During this same period, Army North personnel deployed in support of the State Department/Secret Service during the two political party conventions and the U.N. General Assembly. During the conventions, a general officer from the host state's National Guard exercised command and control of Title 10 and Title 32 forces in support of the governor and the lead federal agency.

DoD and the U.S. Army's ability to respond to the most horrific potential acts of terrorism on U.S. soil increased dramatically this year. For the first time, forces were assigned to a chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) consequence-management response force (CCMRF). Joint Task Force-Civil Support (CS), headquartered at Fort Monroe, Va., under the operational control of Army North, has primary responsibility for deploying to command and control the CCMRF in sup-



***LTG Thomas R. Turner II** became the commander of U.S Army North in December 2006. Previously, LTG Turner was commander of the 101st Airborne Division (Air Assault) and Fort Campbell, Ky. The division was deployed to Operation Iraqi Freedom, Iraq (FOB Speicher). LTG Turner graduated from the U.S. Military Academy and was commissioned as a second lieutenant in the Infantry. His first assignment was with the 1st Battalion, 8th Infantry, 4th Infantry Division (Mechanized), as a platoon leader and executive officer. He attended the Infantry Officer Advanced Course prior to taking command of Company B, 3rd Battalion, 19th Infantry, 24th Infantry Division (Mechanized), at Fort Stewart, Ga. He later served as the aide-de-camp to the deputy commanding general, Combined Arms Development Activity, at Fort Leavenworth, Kan. LTG Turner subsequently served as the battalion S-5 and company commander of Company C, 2nd Battalion, 75th Infantry (Ranger). Upon graduation from the Naval Postgraduate School and completion of the Armed Forces Staff College, LTG Turner was assigned to the 75th Ranger Regiment, where he served as the regimental plans and liaison officer. He later was named the assistant to the commander, 75th Ranger Regiment, during Operation Just Cause in Panama, after which he served as commander, U.N. Command Security Force, Joint Security Area-Panmunjom, Korea. Following completion of the U.S. Army War College in Carlisle, Pa., he assumed command of 2nd Brigade, 325th Airborne Infantry Regiment, 82nd Airborne Division, at Fort Bragg, N.C. Upon relinquishing command, he served as the chief of staff for the 82nd Airborne Division. Selected to attend the Royal College of Defence Studies in London, England, he served a one-year tour as a British Defence College fellow and was subsequently named the executive assistant to the commander in chief, U.S. Atlantic Command, and Supreme Allied Commander Atlantic, in Norfolk, Va. In 1999, he returned to Fort Bragg, where he served as the chief of staff, XVIII Airborne Corps and Fort Bragg. Following this assignment, he was named the assistant division commander for maneuver of the 1st Infantry Division, U.S. Army Europe and Seventh Army, Germany. In 2001 he was assigned as the deputy U.S. military representative to the NATO Military Committee in Brussels, Belgium. In December 2002, LTG Turner assumed command of the U.S. Army Southern Task Force (Airborne) in Vicenza, Italy, and was deployed to Africa as CG, JTF-Liberia in 2003.*

port of a primary federal agency. JTF-CS, with its assigned task forces (operations, aviation and medical), completed its initial training during a mission rehearsal command post exercise at Fort Stewart, Ga., in September 2008.

In February 2009, JTF-CS and elements of CCMRF 9.1 conducted a field training exercise (FTX) that included an emergency deployment readiness exercise and integration with state CBRNE response forces at Camp Blanding, Fla. This FTX, the first of its kind, furthered the readiness of CCMRF 9.1 and validated deployment timelines and requirements.

As part of the homeland defense mission set, Operation Noble Eagle continues. Today Army air defense elements from the 263rd Army Air and Missile Defense Command (South Carolina Army National Guard) and the 3-265th Air Defense Artillery Battalion (Florida Army National Guard) on full-time active duty are integrated into the National Capital Region-Integrated Air Defense System. Under operational control of the North American Aerospace Defense Command, they protect specific sites on a defended asset list.

USARNORTH's efforts to secure land approaches from the south are focused through our theater security cooperation (TSC) activities with the Mexican military. The Mexican armed forces are in the close fight to defeat drug-trafficking cartels. The Mexican army is a proud and professional force, and USARNORTH's cooperation focuses on success. For instance, USARNORTH coordinated exchanges to discuss tactical lessons learned from counterinsurgency operations in Iraq with the three Mexican regional commands responsible for their side of the border. Other support includes English-language training at the Defense Language Institute; exercise visits; orientation visits to military installations; exchanges of medical personnel to share ideas and best practices; and enrollment of senior Mexican military officers in military education centers such as the Army and Naval War Colleges, National Defense University, Command and General Staff Colleges, and technical military education courses.

On October 1, 2008, USARNORTH assumed operational control of JTF-North. Located in El Paso, Texas, JTF-North provides military support to law-enforcement agencies, conducts TSC and facilitates interagency synchronization in order to defeat transnational threats to the United States. Support falls into three broad categories: operational support, primarily in the form of air and ground support, and various sensor platforms; engineer support in the form of fencing, barriers, lateral road improvements and lighting; and general support in the form of mobile training teams and specialty areas like tunnel detection. JTF-North also provides intelligence support through its headquarters, where it assists law-enforcement agencies with predictive analysis and synchronization of multiple agencies at all levels.

In the coming year, our three major goals are to build on our previous accomplishments: We intend to further enhance DoD's CBRNE consequence-management response capability; improve our readiness with all stakeholders, concentrating on both man-made and natural disasters; and further enhance our relationship with the Mexican armed forces and American law-enforcement agencies to secure land approaches from the south.

In fiscal year 2010, we will establish a second CCMRF. USARNORTH, JTF-CS and OCP 1—along with Headquarters, Department of the Army, the Army National Guard and Army Reserve—have been training and preparing the next two CCMRFs, which will assume their missions on October 1, 2009. CCMRF 10.1 is primarily an active duty force (replacing CCMRF 9.1), and CCMRF 10.2 is largely composed of reserve component units. They are being sup-



Everything a U.S. Army North operational command post (OCP) needs to command and control all units reporting for a civil-support or homeland defense mission accompanies the OCP wherever it is deployed.



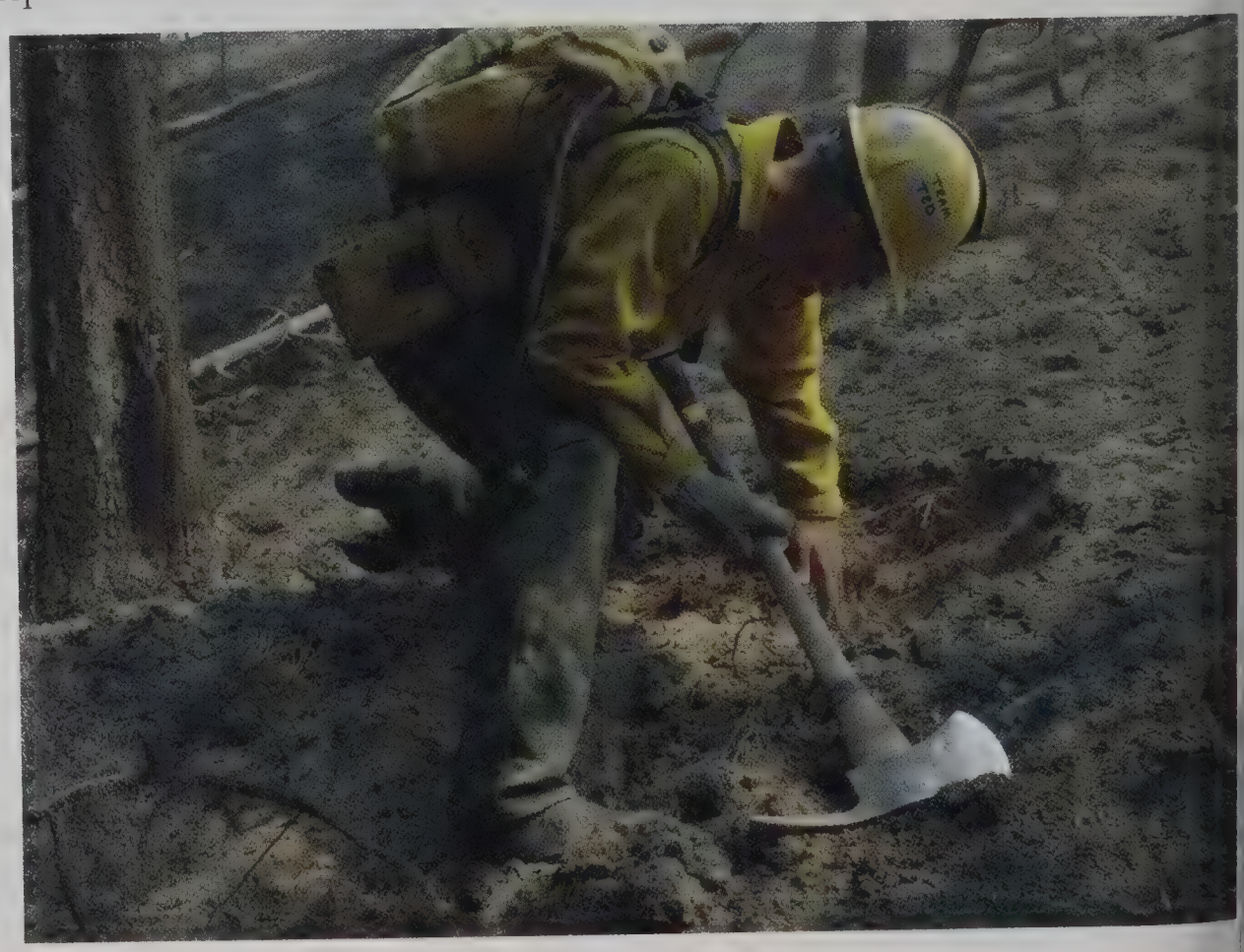
Joint Task Force North servicemembers in a Stryker vehicle assist the border patrol during one of its many non-law-enforcement missions. U.S. Army North assumed operational control of the task force, located in El Paso, Texas, in October 2008.

ported in their training by the USARNORTH Civil Support Training Activity for their technical support tasks, and the commanders of the units progressively prepared their units for their mission rehearsal exercise, Vibrant Response, a command post exercise supported by the Battle Command Training Program at Fort Leavenworth, Kan., this past summer.

This year, experts predict six named tropical storms or hurricanes will make landfall. To that end, our defense coordinating officers and their elements have used the winter months to work with their respective states and regions to continue refining the plans and preparations for the hurricane season based on lessons learned last year. We have also established, from within the headquarters staff, an eleventh DCO/E (not standing) that is trained and certified as a reserve.

In our efforts to enhance our relationship with Mexico and assist Mexicans in their war against drug-trafficking cartels, USARNORTH, through USNORTHCOM and the State Department, will assist in carrying out the Merida Initiative. We will continue to foster a close working relationship with the Mexican army, share lessons learned from our U.S. Army counterinsurgency experiences of the past seven years and increase our Mexican partners' capacity to be successful in the current fight.

U.S. Army North remains the Army's "Strength in the Homeland," ready to provide defense support to civil authorities when directed and to defend, protect and secure the United States and the American people anywhere in the Northern Command area of responsibility. ★



U.S. Army North may be asked to coordinate active duty units to fight wildfires. In 2008, Army North personnel responded to two large fires in California, five hurricanes, two tropical storms and two floods.

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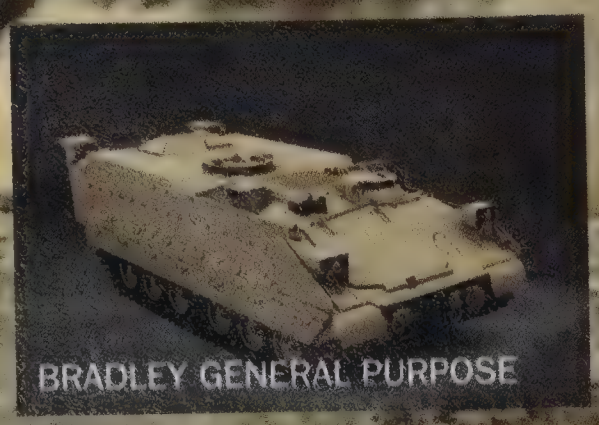
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U.S. Army South: Defense and Fraternity

By MG Keith M. Huber
Commanding General, U.S. Army South

The past 25 years have been a period of enormous change and progress in Latin America and the Caribbean. In 1984, military dictatorships still ruled in Brazil, Chile, Guatemala, Haiti, Panama, Paraguay, Suriname and Uruguay, and tragic civil conflicts raged in Colombia, El Salvador, Guatemala and Nicaragua. Today those same nations and their neighbors—with a few notable exceptions like Cuba and Venezuela—live at peace under democratic governments, enjoy greater economic opportunities because of the free-market reforms of their elected leaders, and play increasingly important roles in the hemisphere. In Haiti, a Brazilian-led U.N. force has kept the peace since 2004, Colombia's brilliant counterinsurgency campaign has greatly





Salvadoran soldiers and civilians practice medical evacuation during Fuerzas Aliadas Humanitarias *(Allied Humanitarian Forces) 2008—an annual multinational, interagency disaster-response exercise planned and supervised by U.S. Army South.*

reduced terrorist violence in the region, and El Salvador has proven to be one of our nation's most stalwart allies in the war on terrorism, contributing 11 rotations of troops to Iraq and supporting U.N. peacekeeping missions in places like Côte d'Ivoire, Haiti, Liberia and Sudan.

The lion's share of credit for these developments belongs to the resilient, resourceful and courageous people of these nations themselves, but a critical enabling factor has been the enduring U.S. military engagement in the region, with U.S. Army South playing the leading role in developing strong, productive partnerships with security forces throughout the U.S. Southern Command (USSOUTHCOM) area of focus (AOF). This region includes 31 nations and 10 territories and spans from the island of Cuba to the southern tip of Cape Horn, Chile, and everywhere in between.

The United States shares a wide range of interests with these more than 450 million neighbors, not the least of which is an increasingly common language and culture. The United States is already the second-largest Spanish-speaking nation in the world, after Mexico, and the U.S. Census Bureau has projected that the Hispanic population will nearly triple by 2050 to equal 30 percent of the nation's total population.

Our economic ties also continue to grow. According to the Congressional Research Service, between 1996 and 2007, total U.S. merchandise trade with Latin America (exports and imports) grew by 137 percent compared to 110 percent for Asia, 114 percent for the European Union and 120 percent for the world. In 2007 alone, U.S. exports grew by 41.4 percent to Peru, 28.4 percent to Colombia, 28.1 percent to Brazil, 22.9 percent to Argentina, 22.1 percent to Chile, 13.3 percent to Venezuela and 12.2 percent to Costa Rica. As a result, "Latin America is the fastest growing U.S. regional trade partner, with the exception of Africa."

The increasing cultural and economic integration with our Latin American and Caribbean neighbors is accompanied by new threats and challenges, however, some of which endanger not only the physical security of our respective peoples but also the hard-won democratic and economic progress in some of the hemisphere's most vulnerable nations. These threats include illicit trafficking in arms, persons and narcotics; attacks on critical infrastructure; and transnational criminal enterprises. While Mexico's escalating gang violence has captured the attention of the U.S. media this year, violent crime in the smaller neighboring nations of Central

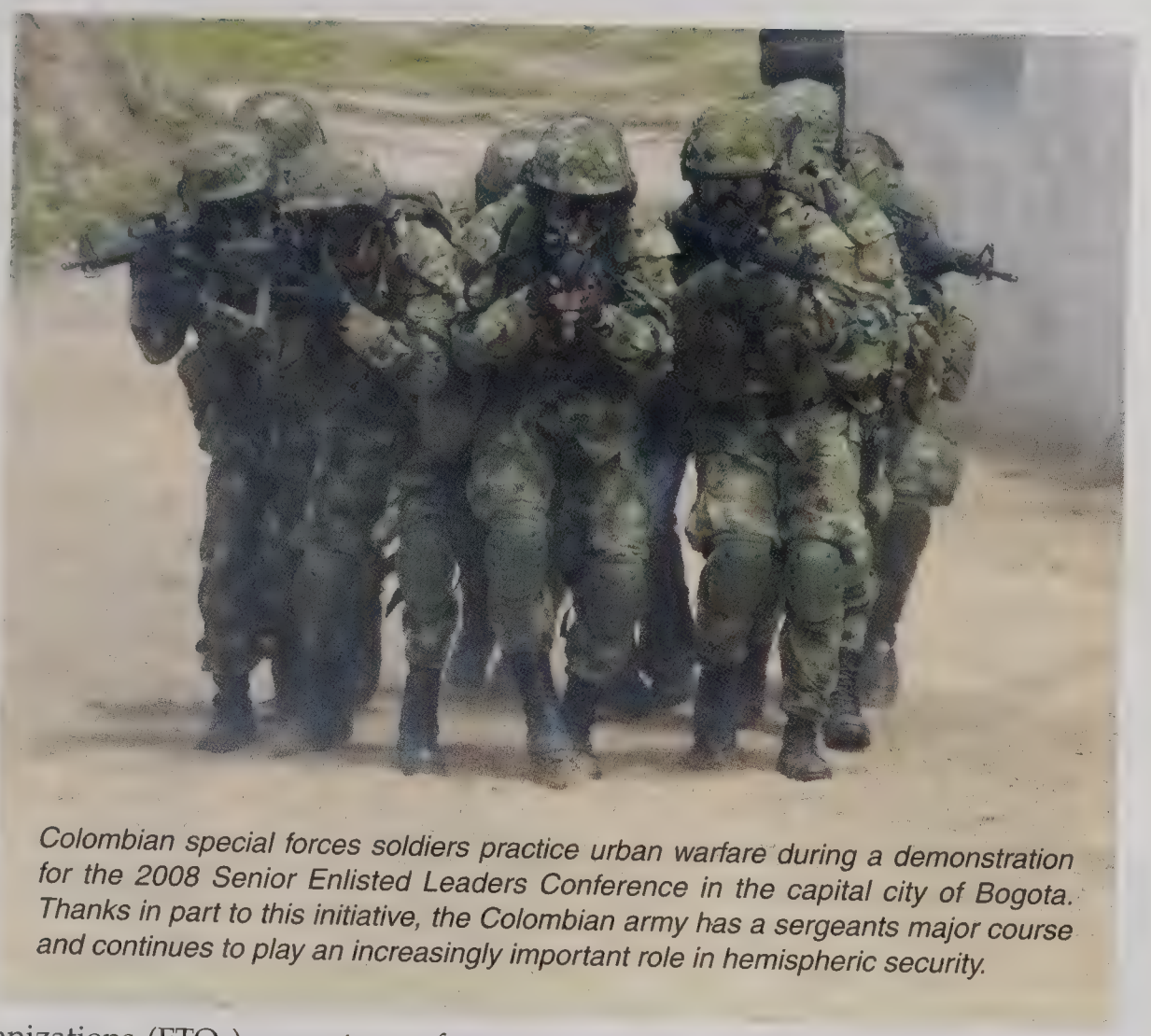


MG Keith M. Huber *assumed command of U.S. Army South in 2007. His previous experience in the U.S. Southern Command (USSOUTHCOM) area of focus includes tours as a Special Forces operational detachment (SCUBA) team leader in Panama, field advisor in Nicaragua and El Salvador, chief of operations (U-3) for the U.N. Mission in Haiti, commander of Joint Task Force Bravo in Honduras, executive officer to the commander of USSOUTHCOM, director of operations for USSOUTHCOM, chairman of the Inter-American Defense Board, and director of the Inter-American Defense College. A graduate of the U.S. Military Academy, MG Huber spent nine years in the 101st Airborne Division (Air Assault) as a company commander, battalion operations officer, brigade operations officer, battalion commander and director of civil-military operations. During Operation Desert Storm, he served as the division's chief of operations. Other assignments include assistant division commander (Operations) for the 10th Mountain Division, commander of Task Force Falcon in Kosovo, and deputy commanding general for First Army. He is a graduate of the Army Command and General Staff College, the Armed Forces Staff College and the Army War College, and has a master's degree in public administration from Golden State University.*

America is actually far worse; the murder rate alone is higher in Guatemala, in Honduras and in El Salvador. Gangs such as *Mara Salvatrucha* and *Calle Diez y Ocho*, which actually originated in Los Angeles, play a leading role in smuggling drugs and weapons across the porous borders of Central and North America. As the State Department's Bureau of Western Hemisphere Affairs concisely states, "these emerging transnational threats have changed the traditional definitions of security and require coordinated, cooperative, and often multilateral responses by the governments of the hemisphere."

Gangs are not the only problem, as the Congressional Research Service has noted: "Although Latin America has not been the focal point in the war on terrorism, countries in the region have struggled with domestic terrorism for decades, and international terrorist groups have at times used the region as a battleground to advance their causes." Three foreign terrorist organizations (FTOs) operate in the Andean Ridge region of Colombia: the Revolutionary Armed Forces of Colombia (FARC), the leftist National Liberation Army (ELN) and remaining elements of the rightist paramilitary United Self-Defense Forces of Colombia (AUC). Another FTO, the Shining Path, still operates in Peru. Evidence recently captured from terrorist camps in the Andean Ridge has raised questions about whether the FARC is receiving support from the government of Venezuela, and Cuba has been listed as a state sponsor of terrorism since 1982. The tri-border region between Argentina, Brazil and Paraguay has been a lucrative source of fundraising for Hamas and Hezbollah, and four members of the Caribbean-based militant group Jamaat al Muslimeen were arrested in June 2007 for plotting to blow up a jet-fuel artery that feeds New York's JFK International Airport. Even Iran is engaged in "subversive activity" in the region, as the Secretary of Defense testified to the Senate Armed Services Committee in January.

As the Army service component command of USSOUTHCOM, U.S. Army South supports the war on terrorism by providing Army forces to Joint Task Force (JTF) Guantanamo and Colombia's Apiay Air Force Base, a critical hub in the fight against narco-terrorists and illegal drug trafficking. More importantly, U.S. Army South helps forge the coordinated, cooperative and multilateral responses necessary to effectively confront the emerging transnational threats south of our border. Working with the armies and security forces of the region in a manner that emphasizes mutual respect and partnership—rather than dictating a distinctly North American solution or approach to every problem—we help improve interoperability and mutual capabilities across the spectrum of operations, with a particular emphasis on peacekeeping, disaster response, humanitarian assistance and NCO development. The operations and forums we use include the following:



Colombian special forces soldiers practice urban warfare during a demonstration for the 2008 Senior Enlisted Leaders Conference in the capital city of Bogota. Thanks in part to this initiative, the Colombian army has a sergeants major course and continues to play an increasingly important role in hemispheric security.

■ *Fuerzas Aliadas PANAMAX* (Allied Forces PANAMAX), an annual multinational and interagency engagement that brings together civil and military forces throughout the hemisphere to practice defending the Panama Canal against unconventional threats while enhancing our interoperability in contingency operations.

■ *Peacekeeping Operations—Americas* (PKO-A), which combines PKO North (for Central America and the Caribbean) and PKO South (for South America) into one integrated and truly hemispheric training event. It allows participating nations and organizations to test their skills in a wide range of situations commonly experienced in peacekeeping operations throughout the world.

■ *Fuerzas Aliadas Humanitarias* (Allied Humanitarian Forces), a multinational and interagency operation that uses field-training situations, seminars and classes to help improve the collective ability of partner nations and international organizations to rapidly and effectively respond to natural disasters. The need for quick, effective responses is particularly critical in Central America and the Caribbean, where severe earthquakes and hurricanes can reverse decades of economic progress overnight and leave tens of thousands of citizens homeless and vulnerable to disease, dehydration and starvation.

■ *Beyond the Horizon* (BTH), an annual humanitarian and civic-assistance operation that combines the medical, dental, veterinary and engineering missions of New Horizons with a host of other military-to-military contacts to provide a

more comprehensive, holistic and focused approach to our engagements with the region.

■ *Senior Enlisted Leaders Conference*, an initiative that brings the senior noncommissioned officers of the region together to discuss ways of enhancing the role of NCOs in their respective armies and security forces. Thanks in part to this initiative, the nations of Colombia, Ecuador, El Salvador and Honduras have all created sergeants major academies or courses in recent years; Chile will soon be starting a course as well. The development of a stronger NCO corps marks a significant cultural and operational change for these partner nations, who recognize the benefits the U.S. military receives by providing first-class training and leadership opportunities to their enlisted leaders.

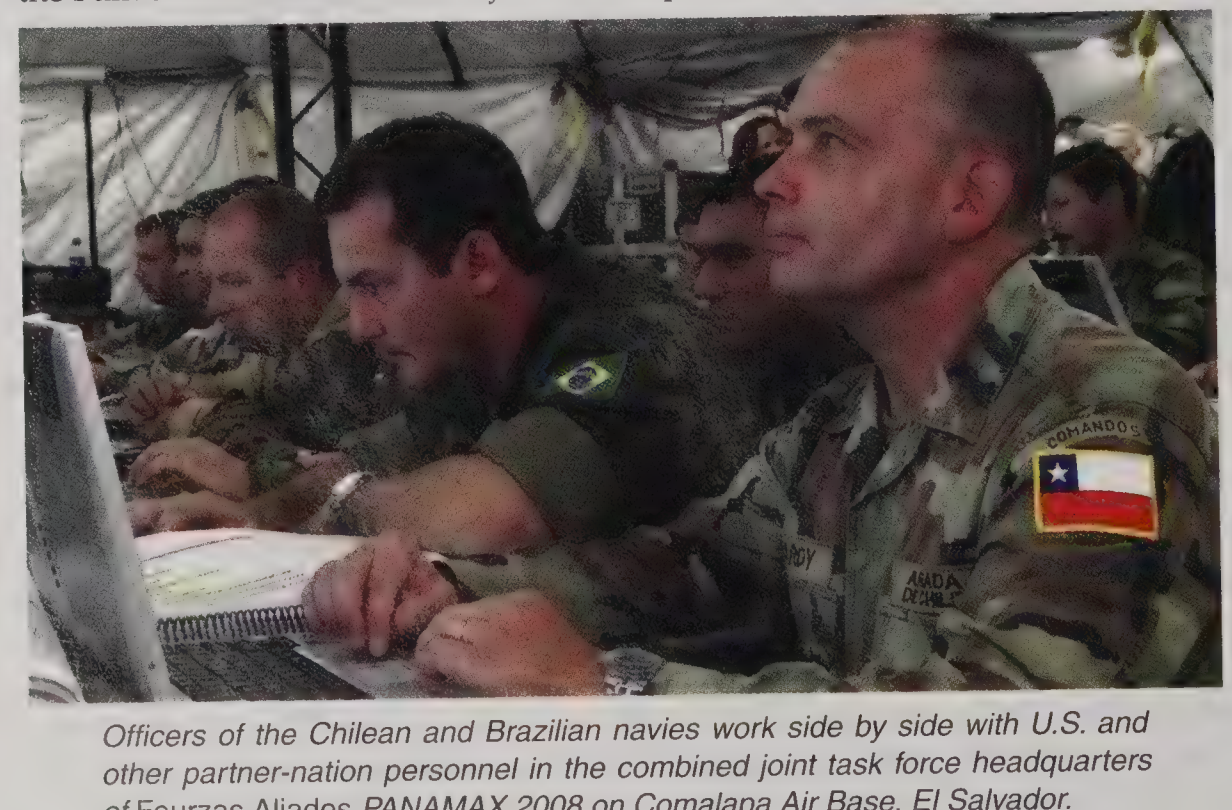
■ *Conference of American Armies* (CAA), a biennial meeting that includes 20 member armies, five observer armies and two international military organizations. Begun in 1960, the conference has seven specialized subconferences, including a Peacekeeping Procedures Conference hosted by U.S. Army South in San Antonio, Texas, in 2008. This headquarters is the U.S. Army's lead proponent for participation in the CAA.

■ *Army-to-Army Bilateral Staff Talks*, which are conducted annually by U.S. Army South on behalf of the Chief of Staff of the Army with Brazil, Chile and El Salvador to strengthen relationships and increase interaction between our armies, as well as enhance partner-nation capabilities. Brazil is the fourth most populous democracy in the world, the fifth largest country, the 10th largest GDP and a key leader in the region. A strong U.S military relationship with regional leaders like Brazil and Chile, and loyal allies like El Salvador, is absolutely essential for promoting hemispheric security and stability.

While the connection is not always an obvious one, these U.S. Army South operations and activities have a direct impact on the security of the United States and the operational tempo of our Army, as the success of the U.N. Stabilization Mission in Haiti clearly demonstrates. In addition to Brazil, the bulk of the mission's military forces are provided by nations from Latin America, including Argentina, Bolivia, Chile, Ecuador, Guatemala, Paraguay, Peru and Uruguay. The success of this operation has secured a potentially volatile situation near our border, freed up the equivalent of two U.S. brigade combat teams for use elsewhere, and not only proven that our partners in the region are capable of leading multinational operations, but also enabled them to share their lessons learned with others—including us—through forums like the Conference of American Armies and PKO-A. Since 2001, a total of 12 Latin American and Caribbean nations have contributed forces to seven major U.N. peacekeeping operations worldwide on an almost continual basis. Altogether, these positive developments prove that our Army's sustained engagement in the region has been, and continues to be, an enormously critical and worthwhile effort in promoting hemispheric security.

As our Army continues transforming to more effectively meet the challenges of the 21st century, so, too, does U.S. Army South. Since October 2007, the command has made the transition from a multicomponent to an active duty headquarters, added 351 positions, established a special troops battalion, supported disaster-relief operations in the AOF, and successfully tested our capability to serve as a JTF headquarters. In November 2007, in response to Tropical Storm Noel, U.S. Army South sent its rapidly deployable command-and-control (RDC2) team to the Dominican Republic. In support of the U.S. Agency for International Development and the Dominican Ministry of Defense, RDC2 personnel synchronized flight operations; coordinated the rescue of 56 people; conducted five medevac missions; transported 119 military, medical and aid workers; performed a three-day medical readiness training exercise (MEDRETE); and provided more than $1 million in immunizations.

In August 2008, at Comalapa Air Base, El Salvador, U.S. Army South's operational command post served as the nucleus of the combined joint task force (CJTF) headquarters for PANAMAX, one of the largest multinational training exercises in the world. Sponsored by USSOUTHCOM, the exercise involved more than 30 ships, a dozen aircraft and 7,000 personnel from 20 nations working at multiple locations on land and at sea, from Arizona and Florida to Honduras and El Salvador, as well as the Pacific and Caribbean approaches to the Panama Canal. A Salvadoran general and Colombian admiral served as the CJTF deputy commanders for maneuver and support, and 44 other partner-nation personnel served throughout the CJTF staff, all functioning as a seamless, integrated team with their U.S. counterparts. Opportunities like PANAMAX are indispensable in forging a truly *American*—in the most inclusive sense of the word—team that can rapidly respond to future contingency operations



Officers of the Chilean and Brazilian navies work side by side with U.S. and other partner-nation personnel in the combined joint task force headquarters of Feurzas Aliades *PANAMAX 2008 on Comalapa Air Base, El Salvador.*

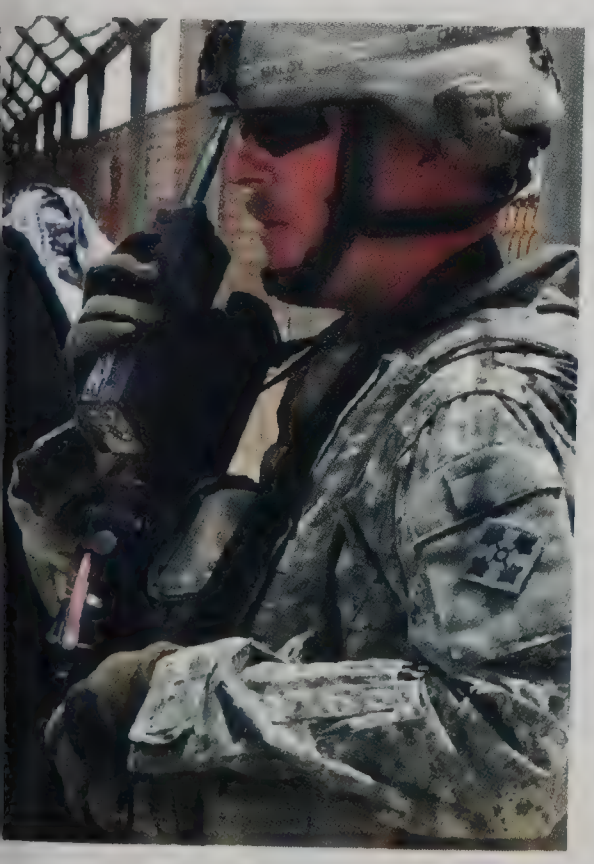
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Thomas Howes, Marc Gonsalves and Keith Stansell (left to right) celebrate their freedom in July 2008. U.S. Army South planned and executed the operation to reintegrate the men, who were rescued after more than five years of captivity by insurgents in Colombia.

in the AOF. As a result of PANAMAX 2008, U.S. Army South is "JTF-certified" to lead such operations in the future, should the need arise.

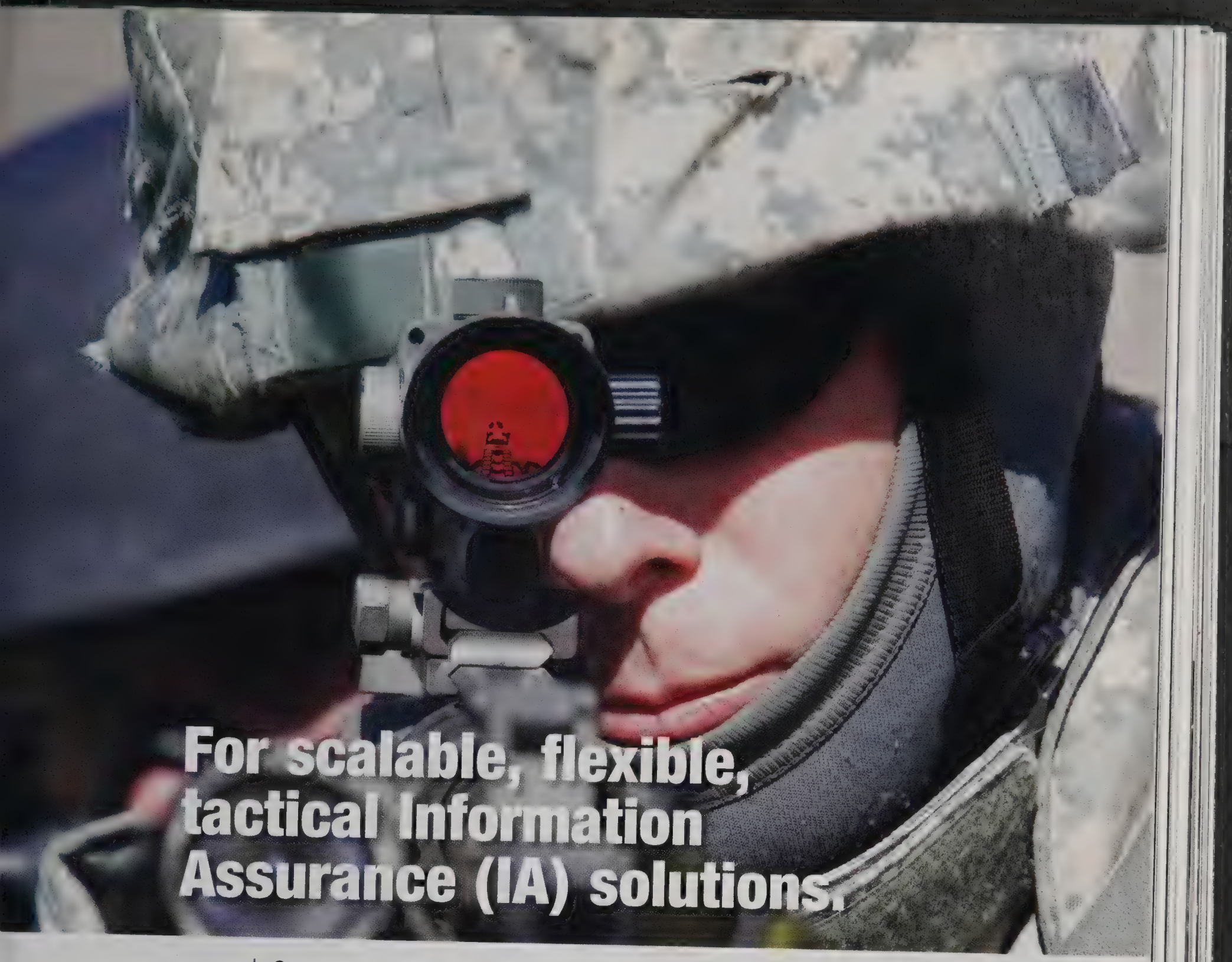
This kind of cooperation and integration is not just limited to training events. The U.S. Army South headquarters at Fort Sam Houston, Texas, includes foreign liaison officers from the nations of Brazil, Chile and Colombia on its full-time staff, greatly enhancing the ties between our respective armies and helping provide a vital partner-nation perspective to our planning that pays enormous dividends to our operations and missions.

Perhaps the most tangible example of the new way U.S. Army South does business is the change from New Horizons to Beyond the Horizon. New Horizons was primarily an annual training opportunity for U.S. reserve component personnel to provide medical, dental, veterinary and engineering assistance to rural communities throughout Latin America and the Caribbean. BTH improves upon that foundation in several significant ways. First, we designed it to be a *regional* operation that encompasses multiple types of smaller engagements across several nations, producing a bigger "bang for the buck" from the personnel and assets on the ground. Second, our footprint is significantly reduced by housing our personnel as often as possible in partner-nation military facilities rather than constructing costly and time-consuming base camps. Third, BTH is divided into three phases—planning, execution and sustainment/follow-up—that run simultaneously at different locations. This allows our personnel to visit the previous year's sites to assess their quality and scout the sites for next year's missions, concurrent with Phase II operations.

Last year, U.S. Army South deployed one BTH task force to Central America and another to the Caribbean, where it conducted 15 medical readiness training exercises and three dental readiness training exercises (DENTRETEs), built two new schools and one new clinic, and renovated 37 existing structures. This year, we will send Partnership for the Americas Collaboration and Coordination Elements to Colombia, the Dominican Republic, Honduras, Jamaica, and Trinidad and Tobago with the goal of conducting 14 MEDRETEs and one DENTRETE, building one new school and one new clinic, and renovating 33 existing structures. U.S. Army South will also conduct MEDRETEs in El Salvador, Panama, Guatemala, Nicaragua, Belize, Suriname and Haiti. Our intent is to maintain a persistent U.S. presence throughout the region in order to address our partners' needs more holistically while demonstrating that the United States is an interested and responsible partner, doing what it can to assist others.

Finally, U.S. Army South has a unique additional duty closer to home as the Army's executive agent for Phase III hostage reintegration and USSOUTHCOM's agent for Phase I through III reintegration. In July 2008, 15 civilians held hostage by the FARC—including three U.S. contractors captured in February 2003—were freed from captivity in a superbly planned and executed mission by the Colombian military. When Marc Gonsalves, Thomas Howes and Keith Stansell arrived in the United States, they began a reintegration process that was planned at U.S. Army South shortly after their capture and refined by annual rehearsals as well as the August 2007 reintegration of a civilian contractor released from captivity in Ethiopia. This valuable process allowed the three men the time and assistance necessary to prepare for a return to normal life and afforded them the opportunity to share their priceless firsthand knowledge of the FARC with intelligence specialists. Our experience with these missions and our close proximity to Brooke Army Medical Center, Fort Sam Houston, make us ideally qualified to conduct future reintegration missions for Defense Department personnel rescued or released from captivity.

From theater security cooperation to contingency operations to hostage reintegration, U.S. Army South plays a unique and vital role in our national defense and remains fully committed to building strong and lasting relationships with our many valuable friends and partners throughout the Americas—partners who will continue to play an increasingly important role in hemispheric security and military operations worldwide. "Defense and Fraternity" is more than just a motto for U.S. Army South; it's the way we do business. ★



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MDW: The Army, The National Capital Region And Continuity for the Future

By BG Karl R. Horst
Commanding General,
U.S. Army Military District of Washington
and
Commander, Joint Force
Headquarters–National Capital Region

The multidimensional, one-of-a-kind component command of the Joint Force Headquarters-National Capital Region (JFHQ-NCR), the U.S. Army Military District of Washington (MDW), consistently shows how "Army Strong" adapts to high-stakes operations in the highly visible, crucially vital environs of the nation's capital. Maximizing on the principle of economy of force, we do so much here for the Army, our veterans and the nation. With great pride and respect, we represent all American men and women in uniform by our proximity to national leadership and through our memorial activities at Dover Air Force Base, Del., and Arlington National Cemetery.





President Barack Obama lays a wreath at the Tomb of the Unknowns during 2009 Memorial Day commemorations at Arlington National Cemetery in Arlington, Va. The U.S. Army Military District of Washington performs the time-honored rituals at Arlington and throughout the National Capital Region.

Those coming to Washington should set aside time to visit the grounds of Arlington National Cemetery, as millions do each year, to ponder the sacrifices made by generations of Americans who have borne and who continue to bear the heaviest burden for their country. These hallowed grounds are our special charge. As President Obama noted on Memorial Day, the "quarter of a million marble headstones [that] dot these rolling hills … can seem overwhelming." In the daily operations of the cemetery, however, the staff, the chaplains and the servicemembers who perform the military honors, those ministering to the family members and the Arlington Ladies who attend each burial fully realize that for the families of the fallen, every single stone stands out, each representing a life of service and a unique story.



BG Karl R. Horst *serves as the commanding general, U.S. Army Military District of Washington/commander, Joint Force Headquarters-National Capital Region. A prior enlisted soldier, BG Horst graduated from the U.S. Military Academy in 1978 and has commanded troops in the 3rd Infantry Division and the 82nd Airborne Division, with whom he served in combat during both Operations Desert Storm/Shield and Iraqi Freedom. Most recently, he served as the deputy commanding general of the XVIII Airborne Corps and Fort Bragg, N.C. Other previous assignments have included aide-de-camp to the Chief of Staff for the U.S. Army and special assistant to the Supreme Allied Commander Europe, Headquarters/Supreme Allied Powers Europe, Belgium. He has a master's degree in public administration from Shippensburg University of Pennsylvania, and he is a graduate of the Armed Forces Staff College and the U.S. Army War College.*

Arlington National Cemetery is a prism through which is shown the nation's respect for those who served the cause of freedom and our Constitution. You may not be present at a funeral service, but you can witness the same singular focus in the 24/7 watch kept at the Tomb of the Unknowns.

In this, the Year of the NCO, I want to highlight our extraordinary noncommissioned officers. So much of what MDW does is in the public view; the experienced eyes of our noncommissioned officers instill the importance of our missions in our new soldiers. NCOs are the ones who know what right looks like. They are the cadre who conduct the 3rd U.S. Infantry's regimental orientation program to ingrain those high standards over a tough three-week course. When the dignified transfer of the repatriated remains of fallen warriors was opened to the media last spring (pending each family's approval) at Dover Air Force Base, Del., the public glimpsed the focus Old Guard soldiers maintain whether someone is watching or not. It is no different for the aviation crew chief, the U.S. Army Band section leader or the Old Guard platoon sergeant—they are the backbone of our team, and they represent everything that is good and right in the Military District of Washington.

The "hooah" festivity of the Army Ten-Miler is one aspect of our operation that we all look forward to. The camaraderie has to take a back seat, however, to ensuring that the event takes place safely in a secure environment, that our planning is thorough and its execution hits all of the marks; and that the changes we made from last year worked and the entire process is evaluated against what we think we might achieve next year.

The same applies to Twilight Tattoo performances and appearances of the Old Guard Fife and Drum Corps and the Army Drill Team throughout our nation, as well as to our Spirit of America outreach shows that tell the Army story to audiences in Washington, D.C.; Providence, R.I.; and Columbus, Ohio. Planning and NCOs keep us on track.

Before I turn to our goals for the coming year and the year ahead, let me review some of what this command has accomplished over the past year. I have already alluded to the flawless execution of our regular missions. MDW is tasked to conduct operations that deter, prevent and respond to threats aimed here in the National Capital Region as well as to conduct world-class ceremonial, musical and special events. MDW is the core element of JFHQ-NCR, which has the more inclusive mission to plan, coordinate, maintain situational awareness, and, as directed, employ forces for homeland defense and defense support to civil authorities in the NCR joint operations area to safeguard the nation's capital. In such

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ontingency operations, we operate as Joint Task Force NCR, n operational component of U.S. Northern Command, reeiving forces from each of the services as needed.

Our Infantry brigade combat team, the 3rd U.S. Infantry Regiment, has grown to a two-battalion depth to properly esource both the ceremonial mission and tactical training nd operations. The 4th Battalion of the 3rd U.S. Infantry fficially was established last December. The 4th Battalion a special troops battalion that handles more than 6,000 eremonies and special events each year. Among its units, lpha Company doubles as the historically based Comander in Chief's Guard, complete with Brown Bess musets and drills established by Baron von Steuben. Echo ompany is the home of the Continental Color Guard ement for our ground-based homeland defense mission and deployable with the rest of our expeditionary Army. The regiment has been called on for the fifth time in five years to deploy a company in the war on terrorism, this time in Iraq.

The Army Air Operations Group (AOG) is our aviation brigade-level command. In addition to overseeing airfield operations at Davison Army Airfield, Fort Belvoir, Va., it provides the critical planning, coordination and synchronization of Army aviation and technical rescue operations in the NCR. Air movement of our Army and nation's senior leaders falls under the AOG's primary oversight. The AOG also ensures that our aviation and technical rescue warriors are trained and ready to execute some of the command's most crucial contingency missions on a moment's notice.



The Old Guard Fife and Drum Corps, part of the 3rd U.S. Infantry (The Old Guard), performs during a ceremony activating the National Museum of the U.S. Army at Fort Belvoir, Va.

m, carrying the national colors and those of the regint in the uniform of the Continental Army. The Old ard Fife and Drum Corps is a company of fifers, drumrs and buglers that likewise draws its uniform and ertoire from the Revolutionary period. The 289th MP npany handles law enforcement, while the 529th Regital Support Company carries out tasks from medical port to motor pool and mess operations. Within the 4th alion's headquarters and headquarters company HC) are the renowned and well-travelled Army Drill n and the sentinels of the Tomb of the Unknowns.

he 1st Battalion of the 3rd U.S. Infantry's day-to-day fois funeral operations within Arlington National Cemewith the line companies—B, C, D and H—and an HHC a caisson platoon and the Salute Guns battery, which res that proper honors continue to be observed for those answered the nation's call. Such duty rotates so as to ensoldiers to maintain their infantry skills. Whatever else, must remain operationally ready as the core military el-

The Army's executive jet fleet is flown by AOG's U.S. Army Priority Air Transport from a headquarters at Andrews Air Force Base, Md., and bases in Hawaii and Germany on transoceanic missions to wherever the Army has projected its power. When the mission involves travel to destinations with unknown or questionable security, MDW military policemen trained as Phoenix Raven protectors cooperate with local authorities and provide around-the-clock vigilance as additional security.

In addition to providing rotary-wing mission support within 200 nautical miles of Washington, D.C., the 12th Aviation Battalion (Wings of Freedom) has contingency and first-responder missions for which it must maintain aircraft on alert status—and its 911th Technical Rescue Engineer Company on a quick recall—when their expertise is needed, as it was in responding to the 9/11 attack on the Pentagon.

Musical performance is what the U.S. Army Band (Pershing's Own) is all about. There are eight ensembles with established personnel rosters, including the Concert and Cer-



The U.S. Army Concert Band, Army Chorus and Herald Trumpets perform at Avery Fisher Hall, Lincoln Center, N.Y.

emonial Bands, the Brass Quintet, the popular music group Downrange, the Chorus, the Strings, the Herald Trumpets and the Blues, a jazz ensemble. The musicians also come together as the Army Orchestra and the Army Woodwind Quintet, as well as in a variety of smaller unit permutations that answer their call to make music. They are often the background for state occasions including appearances at the White House, and are sometimes the focus for international exchange, for example, when they play at embassies. Like their Old Guard counterparts, the musicians of the Army Band are present at monthly Army retirement ceremonies at Fort Myer, Va., and daily at Arlington Cemetery, rendering in each instance recognition of honorable service. They perform at the Lincoln Center and Avery Fisher Hall, at school auditoriums and veterans' funerals, giving performances that evoke pride in our Army and the nation—fans are never far from a free concert or recital.

Very few of our missions could have been accomplished without the continuing support provided from the garrisons that base, house and support this command. They are our offices and neighborhoods, stores and recreation facilities, the means through which we provide support to families and warfighters alike.

The Fort Myer Military Community—the core of the newly minted joint base Myer-Henderson Hall—is the multiservice garrison that looks after our headquarters on Fort McNair in the District of Columbia as well as the Marine Corps facilities at Henderson Hall, adjacent to Fort Myer and Arlington National Cemetery. Fort Belvoir, a post which has enjoyed an exponential level of growth, is home to other MDW units and lies within the National Capital Region. Just outside the NCR, Fort Meade, Md., provides a growing campus and improved facilities through progressing base consolidation initiatives. Fort A.P. Hill, Va., with its superb range facilities, serves this command's training needs, while Fort Hamilton, Brooklyn, N.Y., is the northernmost MDW outpost, a historic defender of the "other capital" of the nation.

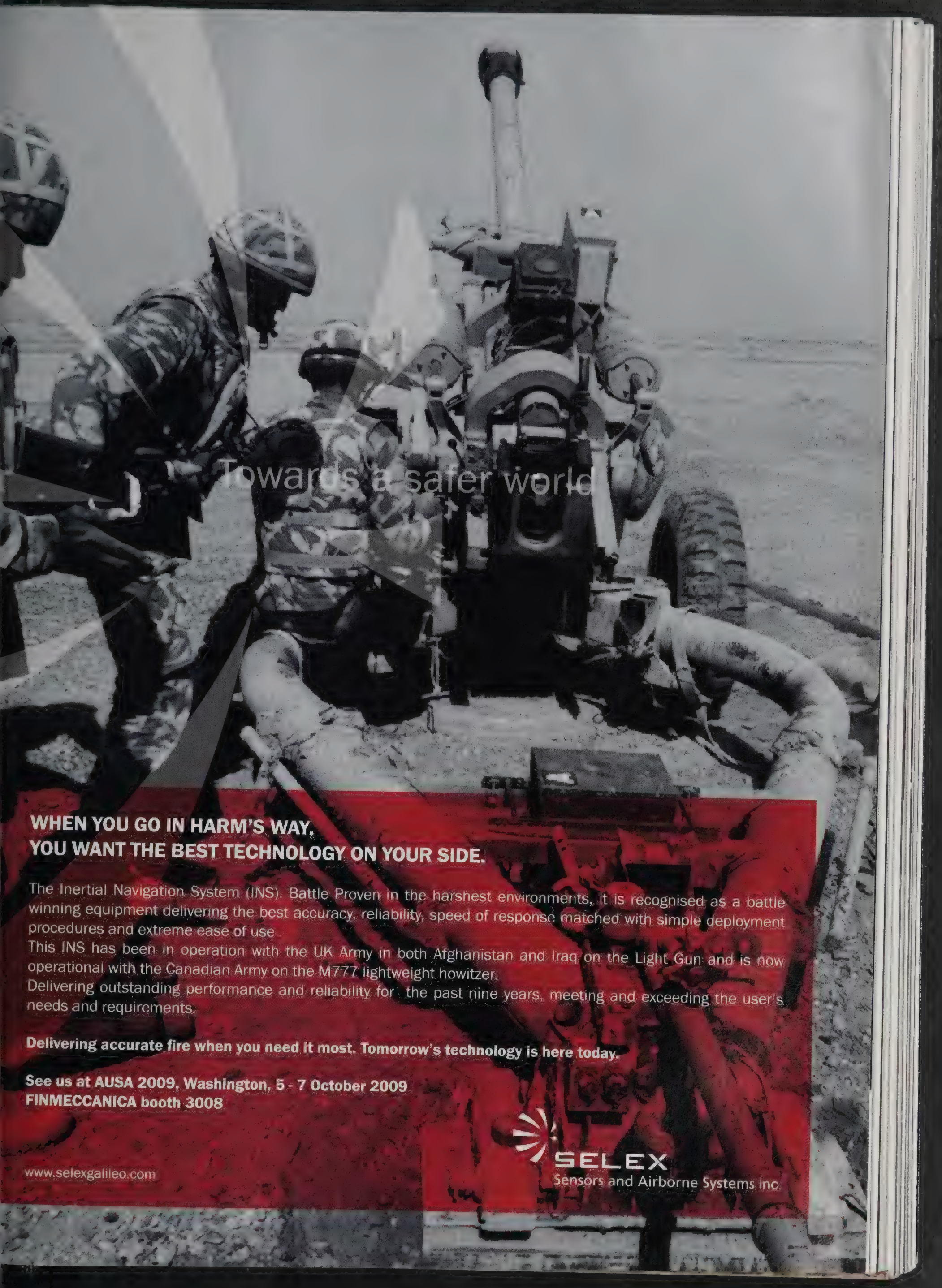
These facilities, like those of our JFHQ-NCR component partners, are vital to all planning related to homeland defense and defense support to civil authorities, assets not just for the Department of Defense, but for the nation.

One mission carried out last year eclipsed the others in its scale and importance: the support rendered to the 56th Inauguration of the President of the United States. The world saw a disciplined transfer of authority from one executive to another, and the region continued to function while hosting days of inaugural activities that drew millions to the celebrations. JFHQ-NCR and MDW were integral to the ceremonial aspects and to the interagency operational planning and execution that allowed the events to proceed safely and smoothly.

As JFHQ-NCR, the command established the Armed Forces Inauguration Committee (AFIC) to support the ceremonial aspects of the inauguration. Planning began well ahead of the arrival of AFIC's initial cadre 18 months in advance of the event. AFIC grew to a core of some 250 personnel from all branches of the armed forces, who were ready to support the Presidential Inaugural Committee and the Joint Congressional Committee on Inaugural Ceremonies when they formed. Another 500 personnel arrived just in time to take part in operational execution, facilitating 18 inaugural events with a total of some 5,000 ceremonial troops.

The 2009 inauguration was the largest inaugural security operation in U.S. history. Already a player in the ceremonial arena, JFHQ-NCR took a supporting role, providing some limited, unique capabilities and, as a joint task force, was prepared to provide more through the two-week inaugural period. The 3,000 assigned servicemembers and 300 government civilians and contractors on hand for coordinated DoD assistance composed the biggest Title 10 force mustered under U.S. Northern Command since Hurricane Katrina.

Already an exemplar of regional cooperation, the National Capital Region, in its efforts to facilitate the largest public gathering in the District of Columbia involving all branches of government, became a laboratory for the role of government in homeland security. As the lead federal agency, the U.S. Secret Service established overall direction. The Military District of Washington participated through an executive steering committee with other federal and local partners. The interagency partnerships ex



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SSG Matthew Tardio (right), 1st Battalion, 3rd U.S. Infantry Regiment, briefs his squad on tactical movements during a 10-day French Tactical Desert Survival Training Course while deployed with Combined Joint Task Force-Horn of Africa in Djibouti.

tended deep within each agency. Within our command operations, provost and logistics planners interacted with counterparts from other agencies, including many law-enforcement agencies within the NCR. Working groups and subcommittees were the stepping-off points for enhanced communications across the board.

We sought to use our military resources for the benefit of all; our personnel were often able to facilitate communication between other agencies, both personally and through some of our tactics. Our consequence-management working group tackled the "what ifs," developing scenario-based decision support templates that would provide the ability for quick and agile decision making—key to effective response.

More than 25,000 law-enforcement officers from scores of federal, state and local agencies worked together to create a safe and secure environment. The D.C. Metropolitan Police Department doubled its force of 4,100 officers; 600 agents with the FBI were on duty, as were all 1,600 U.S. Capitol Police officers. The National Guard provided some 7,000 additional uniformed personnel on the streets, aiding in crowd direction and maintaining overall good behavior.

As our staff has observed, the planning proceeded from site planning for discrete events toward integration of overall operations with the consideration of transportation, communication and command-and-control aspects so that all involved would maintain a common operating picture. One unknown was how many spectators would show up, but an effective regional communication campaign cautioned the public about potentially large crowds, road closings including all bridge crossings from Virginia into the District of Columbia, security checks, and the need to maintain flexibility and a sense of humor. Those who did come—estimated at 1.8 million on the National Mall alone—brought their patience and goodwill; not one person was arrested.

A key lesson reinforced from the inauguration support is that in an interagency environment, our planning and preparation as a joint command with a joint operations area must be continuous. It is a credit to the regional governmental authorities that they are willing and able to do this cooperatively on a multijurisdictional basis through the Metropolitan Washington Council of Governments and its emergency preparedness council.

Looking ahead, we know that we must ask of ourselves the same dedication of purpose and adherence to guiding principles that have led to past successes. We have focused on goals that have tangible outcomes and measurements. Changes of personnel and leadership—both our own and those of our joint and interagency partners—occur constantly, but will not affect our continuity if we keep our operational approach and manage change together. This command is on course. We have organizational objectives that are understood at every level of the command—action-oriented concepts that find their place in both civilian and military plans.

We seek to institutionalize by such means as improving our enterprise architecture, improving our business practices and documenting our processes. This is how we give newcomers the means to pull in the same direction as the rest of the command.

Ways that we will synchronize include a senior resource council to prioritize and fund requirements, optimizing DoD and interagency medical response capabilities and reviewing manpower allocations against mission requirements. We will attune our actions to those of our joint and Army forces and our installation support to ensure that our capabilities are prepared for the future. We continue to operationalize by determining best practices and developing our people through a lessons-learned process, and by optimizing our concepts and plans for contingencies and defense support to civil authorities. We will rehearse and validate our plans and standards and train the way we will fight. In this way, we will deliver timely and integrated DoD support to civilian authorities.

Finally, we have a constant task of engaging. Strong interagency partnerships must be maintained and strengthened. Our workforce must be trained, motivated and empowered. Our communication must reach out in new ways to support our Army and nation. We face the unique challenge of maintaining excellence in our day-to-day mission while preparing a joint response to possible events that we hope will never occur. We answer this dilemma with the mantra of operational excellence—everyone performing every task to standard toward achievement of our goals.

You can't get up in the morning and run the Army Ten Miler unless you've been training for it, preparing. There are many steps ahead for this command and many goals along the way. For us it never ends: It is a relay, and the baton must always be passed, and never dropped. ★



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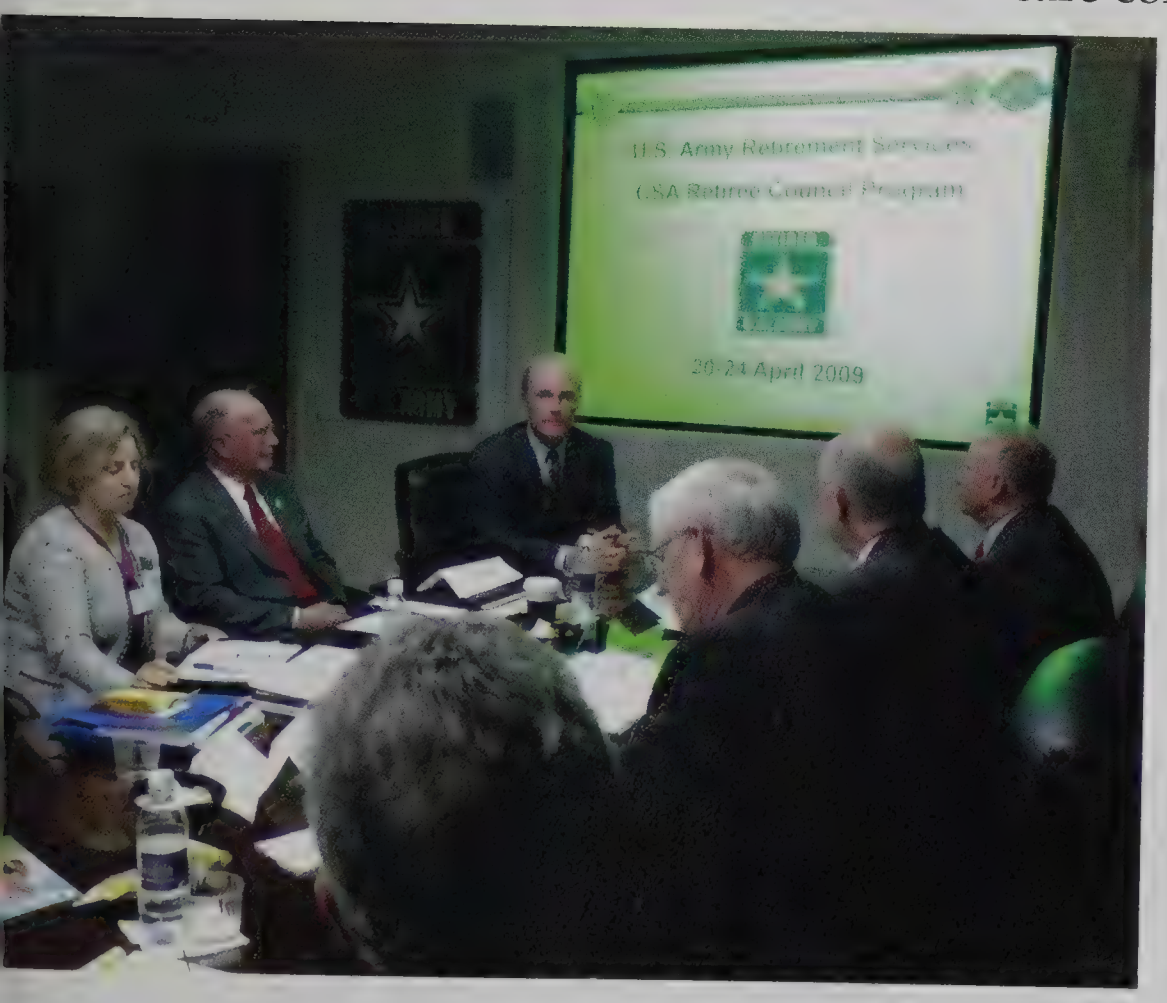
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CSA Retiree Council: Supporting Retired Soldiers

By LTG Frederick E. Vollrath
U.S. Army retired
and
SMA Jack L. Tilley
U.S. Army retired
Cochairmen, CSA Retiree Council

The Chief of Staff of the Army (CSA) Retiree Council cochairmen met with the CSA to report the top retiree issues after the Council's 49th meeting, held in April at the Pentagon. Chaired by LTG Frederick Vollrath, U.S. Army retired, and SMA Jack Tilley, U.S. Army retired, the Council is made up of seven retired officers and seven retired noncommissioned officers. At their annual meeting, they reviewed 30 issues (submitted by installation retiree councils) 13 of which dealt with health care. Health care continues to be the single most important issue for both current and future retired soldiers.



Council members represent retired soldiers and families worldwide. Retired and retiring soldiers and families from the Army in Europe have been supported by COL

Bob Mentell, U.S. Army retired, since 1997, an exceptionally long period of service—most Council members serve for four years. "Being part of the chief's Council and the local council means being able to stay green—to still be part of the Army," COL Mentell said. "It's an opportunity to pay back."

For new Council member CSM William Hoffer, U.S. Army retired, from the Carlisle Barracks, Pa., installation retiree council, meetings with leaders including the Secretary of the Army, the Vice Chief of Staff and the Deputy Chief of Staff for Personnel (G-1) gave him a better picture of the Council's relationship with the Army. He commented, "What caught my attention was that these leaders would talk to us about their programs and then would ask us for our input and for our support. You could see that the chief's Council is a program through which the Army is helping its own and vice versa."

Health Care

Recruiting and retention would be affected if health-care policy were determined by budgetary constraints alone, the Council warned in its report to the CSA. The Council made the following recommendations.

- Sustain the military health-care system with full resourcing and emphasis on direct care.
- If TRICARE fees must be increased, limit any increase to the annual rate of growth in retired pay, with special consideration to not overburdening retired NCOs E-7 and below.
- Raise the TRICARE provider reimbursement levels to create the physician network needed to make care accessible for all beneficiaries.
- Support legislation to authorize pretax payment of TRICARE enrollment fees and premiums for TRICARE supplemental, long-term care and TRICARE retiree dental insurance.
- Eliminate co-payments for mail-order generic and chronic-care drugs to encourage use of the TRICARE mail-order pharmacy.
- Continue to support DoD and Department of Veterans Affairs collaboration to improve the compatibility of the two health-care systems, preserving and improving benefits, and ensuring seamless transition, especially for wounded warriors.

Communication and Education

In the area of strategic communication and education, the Council report centered on retirement education for soldiers and spouses still on active duty and continued communication with retired soldiers and their families.

The Army should educate soldiers and spouses on their retirement entitlements and benefits, not only as they near retirement, but also as soldiers reach the 10- to 12-year point in their careers. The Council recommended adding retirement modules to courses for mid-grade and senior-grade officers and NCOs and to courses preparing soldiers for command. They suggested that spouses receive similar instruction in family readiness groups and through Army Community Services.

In addition, the Council recommended continuing to fund three hard-copy issues a year of *Army Echoes*, the bulletin for retired soldiers and families, while encouraging (but not requiring) recipients to switch from the paper to the e-mail version.

Other Issues

In areas including the retirement services program, retirees overseas, surviving spouses and retired pay, the Council made the following recommendations.

- Raise the level of funding for pretransition and post-transition services for all installations/garrisons worldwide.
- Establish retirement services officer (RSO) positions in accordance with Installation Management Command's (IMCOM) approved organization and fill those positions at the targeted salary rate.
- Establish RSOs at major Reserve and National Guard commands to ensure that all retiring and retired Guard and Reserve soldiers, their families and survivors are informed of retirement-related benefits and entitlements.
- Support a test program in which retired members of all services who are supported by APOs in Germany would be allowed to send and receive parcels weighing up to 70 pounds, for the purpose of quantifying the impact of such an allowance.
- Eliminate the dependency and indemnity compensation offset to the survivor benefit plan annuity.



***LTG Frederick E. Vollrath**, USA Ret., cochairman, Army Chief of Staff's Retiree Council, was the deputy chief of staff, Personnel (now G-1) of Headquarters, Department of the Army; former deputy chief of staff, Personnel, U.S. Army Europe; and director of Enlisted Personnel Management, U.S. Army Personnel Command. He held other critical positions in information technology and human resource management throughout his 35 years of active duty. For the past eight years he has been the corporate vice president, Human Resources, for Computer Sciences Corporation, and serves on the boards of several academic and financial institutions.*



***SMA Jack L. Tilley**, USA Ret., cochairman, CSA Retiree Council, was the 12th Sergeant Major of the Army. He attended basic training at Fort Lewis, Wash., and advanced individual training at Fort Knox, Ky. Before becoming Sergeant Major of the Army, his assignments as command sergeant major included: U.S. Central Command, MacDill Air Force Base, Fla.; 1st Battalion, 10th Cavalry, Fort Knox; 194th Armor Brigade, Bad Kreuznach, Germany; 1st Armored Division, Bad Kreuznach; and U.S. Army Space and Missile Defense Command, Arlington, Va. His military education includes the first sergeants course and the Sergeants Major Academy. He is also a graduate of the basic airborne course, drill sergeant school and master gunner's course.*

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At the Pentagon, in front of the ASA(M&RA)/DCSPER memorial to those killed on 9/11, CSA Retiree Council members are, from left, (front row) COL (Ret.) Arlene Greenfield, LTG (Ret.) Frederick Vollrath (Cochairman), SMA (Ret.) Jack Tilley (Cochairman), CSM (Ret.) Frank Minosky, COL (Ret.) Robert Mentell, CSM (Ret.) William Hoffer, COL (Ret.) Eileen Watson; (middle row) BG (Ret.) Barton Gilbert, CSM (Ret.) Lonny Cupp; (back row) COL (Ret.) Alan Phillips, SGM (Ret.) Albert Williams, SGM (Ret.) Steven Davis, SGM (Ret.) Clifford Lovett II, CW4 (Ret.) Robert Cooper.

■ Authorize space-available air travel for surviving spouses.

■ Issue eligible surviving spouses an indefinite ID card at age 65.

■ Recognize the extraordinary service of Army Reserve and National Guard soldiers by including mobilization periods in support of contingency operations beginning on or after September 11, 2001, when determining eligibility date for retired pay (instead of the current effective date of January 28, 2008) and by providing medical benefits concurrently with retired pay.

■ Provide full concurrent receipt of military retired pay and VA disability compensation for all eligible military retirees.

■ Support the amendment of Title 10 of the U.S. Code to forgive any overpayment of retired pay for any period after the date of death of the retiree through the last day of the month in which death occurs.

The Council cochairmen will meet with the CSA this month to update him on the progress being made with these issues and to offer further support.

The Army Retirement Services program coordinates the CSA Retiree Council and installation retiree councils at Headquarters, Department of the Army (HQDA) and at the installation level. At HQDA, the Army Retirement Services office—part of the Office of the Deputy Chief of Staff, G-1—coordinates Council activities, including overseeing the nomination of new members and executing the annual meeting. At the installation level, the RSO and installation retiree council often work together. The RSO helps coordinate their meetings while the retiree council often supports the installation's annual Retiree Appreciation Day.

The Army Retirement Services mission is threefold: preparing soldiers and families for retirement; aiding the spouses of soldiers who die on active duty in making survivor benefit elections for their families; and continuing to support soldiers and families after retirement. This year, Army Retirement Services, in coordination with the Army Reserve Command and the Army National Guard, is working to ensure that retiring Reserve and Guard soldiers and their families receive the same excellent support as retiring active component soldiers and families, especially vital in light of their increasing role in the war on terrorism. To that end, Army Retirement Services added a Reserve liaison officer and a National Guard liaison officer to their staffs, each of whom, with the chief of Army Retirement Services and the Army Reserve Command, and the Army National Guard, has created the first retirement guide for Reserve soldiers and families and Guard soldiers and families.

They have also updated the Army Retirement Services regulation 600-8-7 to include chapters on Guard and Reserve retirement policy.

Essential to the support of all retiring and retired soldiers and families is the partnership between Army Retirement Services and Installation Management Command. IMCOM provides funds for all Army programs that serve soldiers and families at the installation level. The Installation Management Agency and Army Retirement Services work together by formal agreement to fully support retiring and retired soldiers and families, and the RSOs who serve them.

Thanks to recent changes in the law regarding saluting the flag and saluting during the national anthem, now more than ever, we can proclaim: Once a soldier, always a soldier—still proud, still serving, still saluting! ★


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24th Annual Army Ten-Miler



Participants from the Missing Parts in Action Team—amputees and their trainers from Walter Reed Army Medical Center and Brooke Army Medical Center—begin the Army Ten-Miler.



Brazilian army Pvt. Reginaldo Campos Jr. of Rio de Janeiro won the Army Ten-Miler with a time of 48 minutes, 59 seconds.



Veena Reddy of Centreville, Va., won the women's division of the Ten-Miler in 58 minutes, 8 seconds.

Drill Sergeants of the Year



SSG Michael F. Johnston, 192nd Infantry Brigade, Fort Benning, Ga., Active Duty Drill Sergeant of the Year.



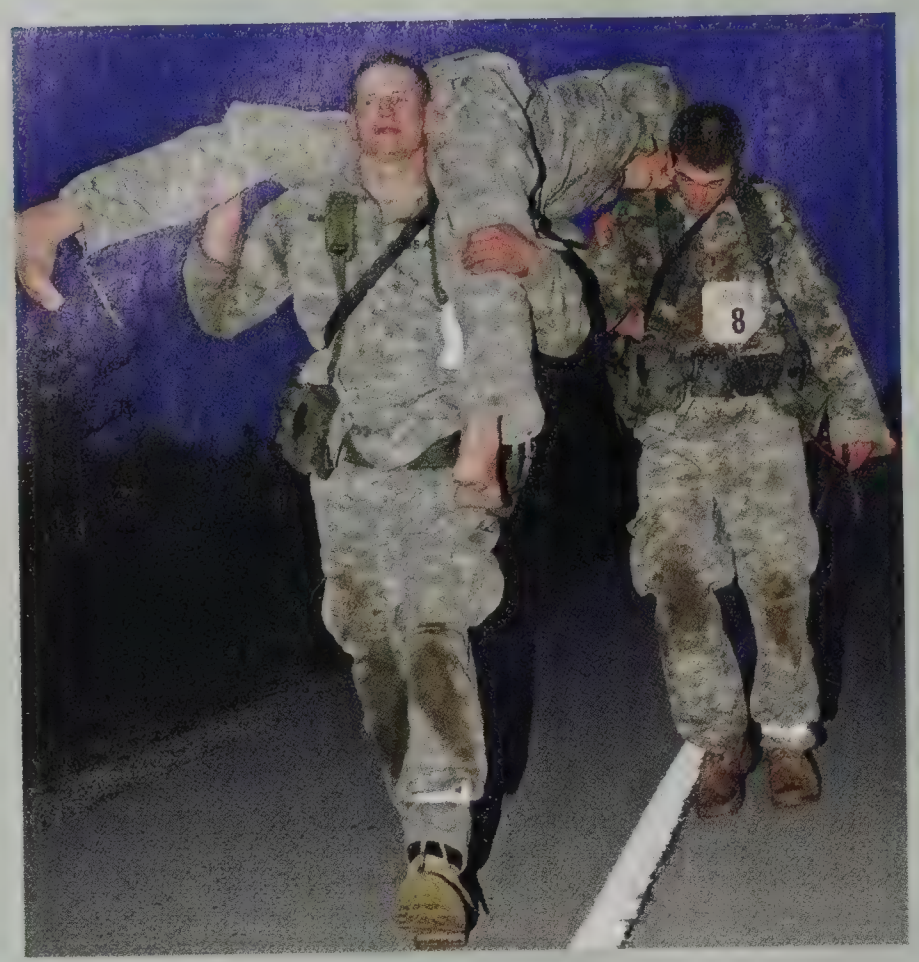
SSG Joshua J. Marshall, 95th Division, Fort Benning, Reserve Component Drill Sergeant of the Year.

Soldier and NCO of the Year



Soldier of the Year SPC David R. Obray, USAR (center left), and NCO of the Year SSG Michael T. Noyce Merino, ARNG (center right), with Army Vice Chief of Staff GEN Peter W. Chiarelli and SMA Kenneth O. Preston at the 2008 AUSA Annual Meeting.

Best Sappers



MSG Michael Behkendorf (left) and 1LT Shawn Hogan from the 7th Engineer Battalion, Fort Drum, N.Y., won the 2009 Best Sapper Competition.

Best Rangers



SFC Blake Simms (left) and SFC Chad Stackpole, from the 4th Ranger Training Battalion, won the Best Ranger Competition.

MacArthur Award



Army Chief of Staff GEN George W. Casey Jr. and Henry Harris III, GEN Douglas MacArthur Foundation representative, recognize the 28 winners of the GEN Douglas MacArthur Leadership Award.

Career Counselor



SFC Strate Flessas, 3rd U.S. Infantry
giment (The Old Guard), Secretary of the
rmy's 2008 Career Counselor of the Year.

Chaplain of the Year



CPT Rebekah Montgomery, Army National Guard, Chaplain of the Year.

Mother of the Year



SSG Melissa Dion, a medic at Fort Drum, N.Y., with her 7-year-old son Ryan, received Operation Homefront's Military Motherhood Award.

Top Chefs



e U.S. Army Culinary Arts Team won gold medals at the World Culinary Olympics in Erfurt, Germany, and the overall silver medal.



SPC Javier Muniz, Fort Bragg, N.C., won the Armed Forces Junior Chef of the Year event in the U.S. Army Culinary Arts Competition.

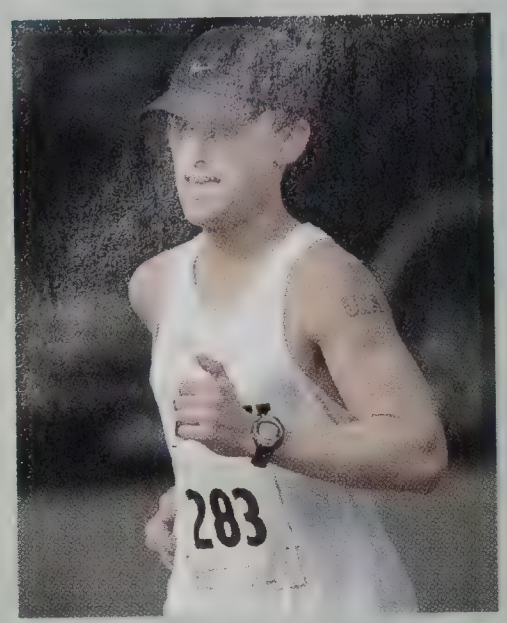


llation of the Year award-winning Fort Bragg, N.C., Culinary Arts Team won the top award in the U.S. Army Culinary Arts Competition.

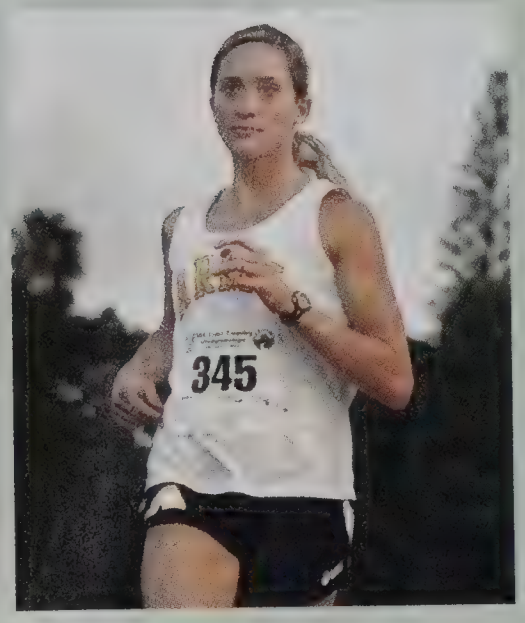


The Fort Bragg team also won the award for Most Artistic Exhibit.

2008 Army Athletes and Coach of the Year



Male Athlete of the Year CPT Shawn Dodge, 732nd Military Intelligence Battalion, Schofield Barracks, Hawaii.

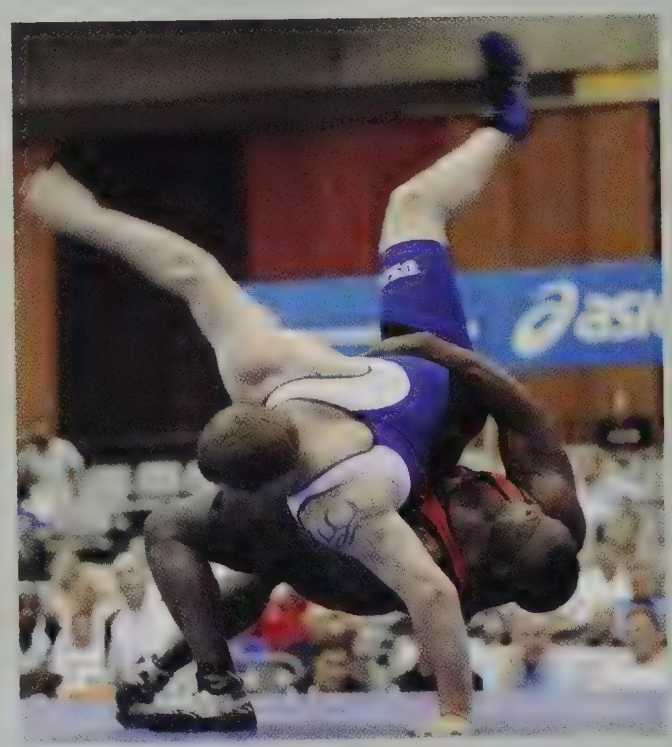


Female Athlete of the Year 1LT Kelly Calway, 500th Military Intelligence Brigade, Schofield Barracks.



Coach of the Year CSM Victor Rivera-Collazo, then assigned to 10th Mountain Division, Fort Drum, N.Y.

Army World-Class Athletes



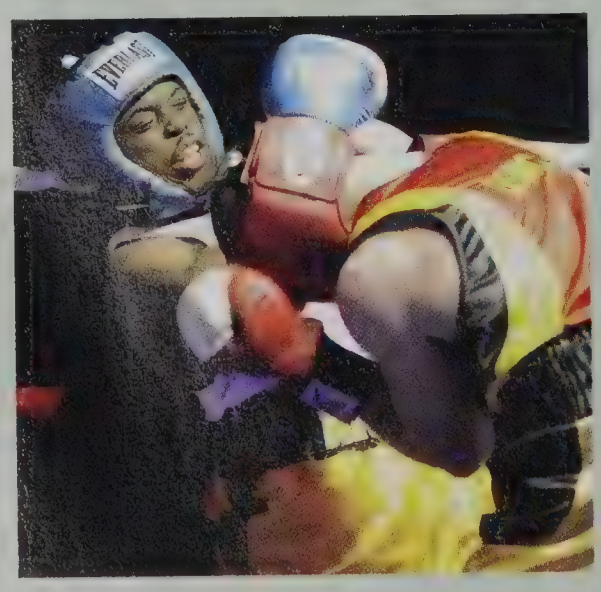
SSG Dremiel Byers (in red) won his eighth Greco-Roman national championship at the 2009 U.S. National Wrestling Championships.

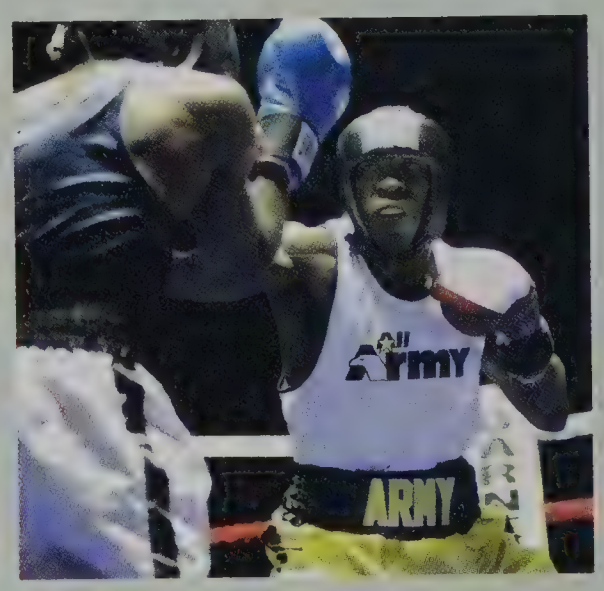


SPC Faruk Sahin (in red) won the 2009 Greco-Roman 145.5-pound championship.

Army Boxers

Five-time Armed Forces champion SGT John Franklin (left) won the 119-pound division of the 2009 Armed Forces Boxing Championships.



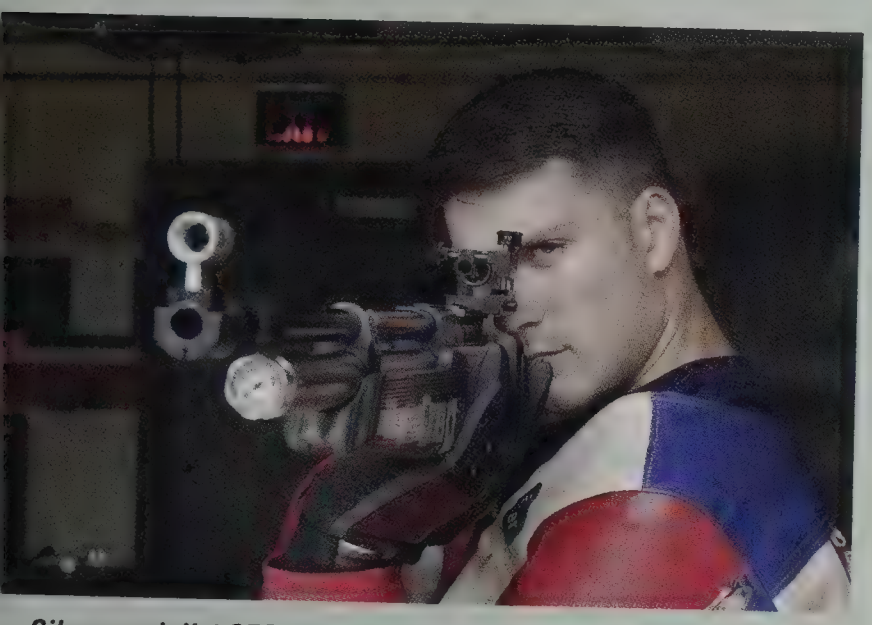


PFC Sidney Williams USAR, won the 165-pound division of the 2009 Armed Forces Boxing Championships.

Army Marksman



S. Army Marksmanship Unit SSG Ryan Hadden (center) won the gold medal in the Trap event at the 2009 San Marino World Cup.



Silver medalist SFC Jason Parker, U.S. Army Marksmanship Unit, men's 300-Meter Three Position Standard Rifle Slow Fire Individual Match at the Conseil Internationale du Sport Militaire (CISM) in Sweden.



ehalf of the U.S. Army Marksmanship Unit, CISM team members accept the Best Nation trophy, a pair of dueling pistols.

Taekwondo Champion



U.S. Army 2LT Steven Ostrander (right) won a gold medal at the 2009 U.S. National Taekwondo Championships.

Army Track and Field



Then-CPT Mike Mai, Fort Lewis, Wash., placed third in the hammer throw at the USA Outdoor Track and Field Championships.

Army Sledder



U.S. Army bobsled driver PFC John Napier (right) and Cory Butner won the two-man U.S. 2009 National Bobsled Championship.

Chess Winners



PFC Pieta Barrett, Fort Polk, La., won the individual category in the four-day Interservice Chess Tournament.



CPT Chris Pitts won the All-Army Chess Tournament held at Fort Myer, Va.

Federal Government Honors



MG David A. Morris presents the State Department's Superior Honor Award to Army Reserve CPT Laura Peters for her work as a provincial reconstruction team liaison in Iraq.



Army budget analyst Steven Gray and logistics officer LTC Douglas Cherry were awarded 2008 Department of the Army Pace Awards for exceptional service.



Under Secretary of Defense for Acquisition, Technology and Logistics John J. Young Jr. and the Hon. Lynn Scarlett, deputy secretary of the Department of the Interior, honor the Pennsylvania Army National Guard team that won the Natural Resources Conservation Award.

Presidential Rank Awards



EN Ann E. Dunwoody with winners of the Presidential Rank Awards: ft to right) Jeffrey Parsons, Dr. Grace Bochenek, Gary Blohm, Teresa erton, Gary Martin, Mark Sagan and Edward Thomas (not pictured, Dr. Claire Gordon).



Secretary of the Army Pete Geren presents the Presidential inguished Rank Award to Joyce E. Morrow, Admin. Assistant to the Secretary of the Army.

Writing Award



Jared Tracy, Fort Leavenworth, Kan. (center), won first place in the 2008 DePuy Writing Contest.

Knowlton Award



LTC Michael Marti awards CSM Sheryl Lyon the Knowlton Award for exemplary service in Military Intelligence.

Joint Best Warrior



SGT Michael Hauser (left, center) and SPC Daniel M. Vickers were honored by CSM Frank M. Leota (left) and MG Robert L. Caslen Jr. as winners of the Joint Best Warrior Competition, Multi-National Division–North.

Safety Award



(Left to right) CSM Nathaniel Bartee, SFC Lastazar Tucker, Dave Sullivan, safety officer, and SFC John Tackett, recipients of a (motorcycle) safety excellence award.

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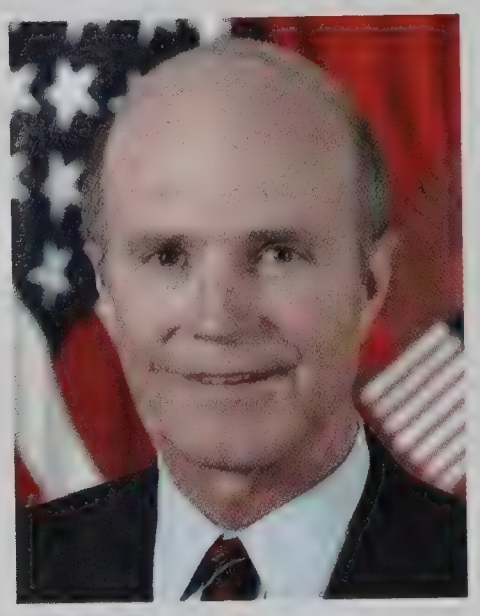
STAFF

COMMAND 3



Dennis Steele/ARMY Magazine

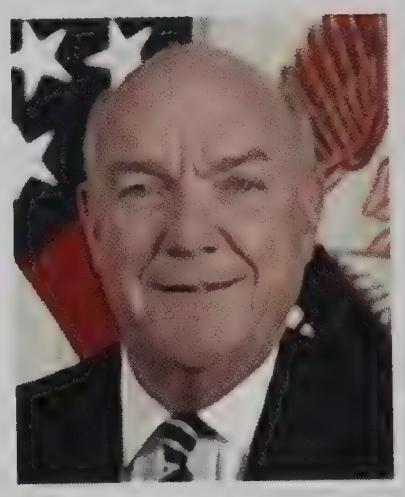
OFFICE OF THE SECRETARY OF THE ARMY



Hon. Pete Geren
Secretary of the Army



Hon. Jo-Ellen Darcy
Asst. Secretary
(Civil Works)



Hon. Thomas R. Lamont
Asst. Secretary
(Manpower and Reserve Affairs)



Hon. Dean G. Popps
Acting Asst. Secretary
(Acquisition, Logistics
and Technology)



L. Jerry Hansen
Senior Official, OASA
(Installations and Environment)

OFFICE OF THE CHIEF OF STAFF



GEN George W. Casey Jr.
Chief of Staff



GEN Peter W. Chiarelli
Vice Chief of Staff



LTG Robert E. Durbin
Special Assistant
to the Chief of Staff,
Army for Enterprise
Management



SMA Kenneth O. Preston
Sergeant Major of the Army

THE ARMY STAFF



LTG David H. Huntoon
Director, Army Staff



LTG Stephen M. Speakes
DCS, G-8



LTG James D. Thurman
DCS, G-3/5/7



LTG Richard P. Zahner
DCS, G-2



LTG Jeffrey A. Sorenson
Chief Information Officer, G-6



LTG Mitchell H. Stevenson
DCS, G-4



MG Gina S. Farrisee
Acting DCS, G-1

The information in this directory is current as of September 1 and is based on data supplied by the Department of the Army.

SPECIAL AND PERSONAL STAFFS



Ms. Joyce Morrow
Acting Deputy Under Secretary of the Army
Administrative Assistant to the Secretary of the Army



LTG R. Steven Whitcomb
The Inspector General



LTG Robert L. Van Antwerp Jr.
Chief of Engineers



LTG Jack C. Stultz Jr.
Chief, Army Reserve



LTG Robert Wilson
ACS, Installation Management



LTG N. Ross Thompson III
Mil. Dep./Dir. Acquisitions, OASA



Mr. Patrick Fitzgerald
Auditor General



Ms. Kathleen S. Miller
Acting Dir., Army Budget, OASA
(Financial Mgmt. and Comptroller)



LTG Eric B. Schoomaker
The Surgeon General



LTG Edgar E. Stanton III
Mil. Dep. Budget, OASA
(Financial Mgmt. and Comptroller)



LTG Scott C. Black
The Judge Advocate General



MG Raymond W. Carpenter
Acting Director,
Army National Guard



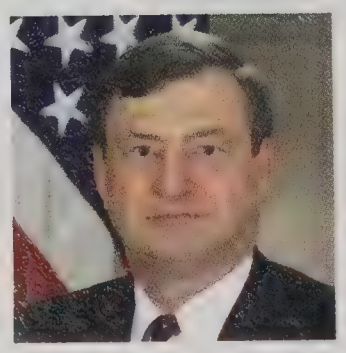
Ch. (MG) Douglas L. Carver
Chief of Chaplains



MG William E. Ingram Jr.
Chairman, Army Reserve
Forces Policy Committee



Ms. Tracey L. Pinson
Director, Small and Disadvantaged Business Utilization Office



Mr. James B. Gunlicks
Vice Director of Army Staff



MG Bernard S. Champoux
Chief, Legislative Liaison



MG Kevin J. Bergner
Chief of Public Affairs



CSM Victor S. Angry
Acting Command Sergeant Major, Army National Guard



CSM Leon Caffie
Command Sergeant Major,
Army Reserve

SENIOR ARMY OFFICERS IN SPECIAL/JOINT ASSIGNMENTS

(Officers are listed here according to their combined, joint or other special assignment title. If an officer also holds an Army-specific command position —a "dual-hat" assignment—he or she is listed by that title in the respective Command and Staff section.)

Commander, U.S. Africa Command
GEN William E. Ward

Commander, U.S. Central Command
GEN David H. Petraeus

Commander, United Nations Command/Combined Forces Command/ Commanding General, U.S. Forces Korea
GEN Walter L. Sharp

Commanding General, U.S. Army NATO
GEN Carter F. Ham

Commander, Multi-National Force-Iraq
GEN Raymond T. Odierno

ommander, International Security Assistance Force-NATO, Afghanistan
GEN Stanley A. McChrystal

Director, Joint Improvised Explosive Device Defeat Organization
LTG Thomas F. Metz

Deputy Commander, U.S. Northern Command/ Vice Commander, U.S. Element North American Aerospace Defense Command
LTG H Steven Blum

Director, National Security Agency/ Chief, Central Security Service
LTG Keith B. Alexander

Director, Defense Intelligence Agency
LTG Ronald L. Burgess Jr.

Director of the Intelligence Staff Office of the Director of National Intelligence
LTG John F. Kimmons

Security Coordinator, Israel-Palestinian Authority, Tel Aviv, Israel
LTG Keith W. Dayton

Assistant to the President/Deputy ational Security Advisor for Iraq and Afghanistan
LTG Douglas E. Lute

Director, The Joint Staff
LTG Lloyd J. Austin III

Commander, Multi-National Corps-Iraq/I Corps
LTG Charles H. Jacoby Jr.

ector, Center for Special Operations, U.S. Special Operations Command
LTG David P. Fridovich

ity Commander, U.S. Special Operations Command
LTG Francis H. Kearney III

ty Commander, Allied Land Component Command, Heidelberg, Germany
LTG John D. Gardner

Deputy Commander, Multi-National Force-Iraq
LTG Kenneth W. Hunzeker

Commanding General, EUSA/Chief of Staff, U.N. Command/ Combined Forces Command/U.S. Forces Korea
LTG Joseph F. Fil Jr.

Director for Logistics, J-4 The Joint Staff
LTG Kathleen M. Gainey

Deputy Commander, U.S. Forces-Afghanistan
LTG David M. Rodriguez

Director, Missile Defense Agency
LTG Patrick J. O'Reilly

Director, Defense Information Systems Agency/Commander, Joint Task Force-Global Network Operations/Deputy Commander, U.S. Strategic Command, Global Network Operations and Defense
LTG Carroll F. Pollett

Director for Command, Control, Communications and Computer (C4) Systems, J-6, The Joint Staff
LTG Dennis L. Via

Military Deputy to the Commander, U.S. Southern Command
LTG Purl K. Keen

Commander, Multi-National Security Transition Command-Iraq/Commander, NATO Training Mission-Iraq
LTG Michael D. Barbero

SENIOR COMMAND SERGEANTS MAJOR IN SPECIAL/JOINT ASSIGNMENTS

(Command sergeants major are listed here according to their combined, joint or other special assignment title. If a command sergeant major holds an Army-specific command position—a "dual-hat" assignment—he or she is listed by that title in the respective Command and Staff section.)

U.S. Central Command
CSM Marvin L. Hill

Supreme Headquarters, Allied Powers Europe
CSM Michael M. Balch

Multi-National Force-Iraq
CSM Lawrence K. Wilson

U.S. Africa Command
CSM Mark S. Ripka

U.S. Special Operations Command
CSM Thomas H. Smith

International Security Assistance Force-NATO, Afghanistan
CSM Michael T. Hall

United Nations Command/Combined Forces Command/U.S. Forces Korea
CSM Robert A. Winzenried

U.S. Army NATO
SGM Robert Collier (Acting)

Multi-National Corps-Iraq/I Corps
CSM Frank A. Grippe

Defense Threat Reduction Agency
CSM Patrick Z. Alston

Space and Missile Defense Command & Army Forces Strategic Command
CSM Ralph C. Borja

Defense Information Systems Agency/Joint Task Force Global Network Operations
CSM Ray Lane

Defense Intelligence Agency
CSM Mark A. Warner

Joint Special Operations Command
CSM Chris Faris

Defense Logistics Agency
CSM David Roman

Combined Security Transition Command-Afghanistan
CSM Larry S. Turner

U.S. Joint Force Headquarters-National Capital Region
CSM Michael W. Williams

U.S. Training Mission to Saudi Arabia
CSM Clarence Keithley

Special Operations Command Central
CSM Richard C. Kimmich

Deployable Joint Task Force/NATO Response Force
CSM Robert M. Lonergan

ARMY STAFF FIELD OPERATING AGENCIES/SUPPORT AGENCIES

Army Audit Agency
Alexandria, Va.
Patrick Fitzgerald

Army Corrections Command
Arlington, Va.
COL Katherine Miller

Army Environmental Policy Institute
Arlington, Va.
Michael Cain

Army Headquarters Services
Arlington, Va.
Steve Redmann

Army Public Affairs Center
COL Joseph Richard

Army Review Boards Agency
Arlington, Va.
Catherine Mitrano

Asymmetric Warfare Group
Fort Meade, Md.
COL Robert Shaw

Center for Army Analysis
Fort Belvoir, Va.
E.B. Vandiver III

Center of Military History
Washington, D.C.
Jeffrey J. Clarke

Civilian Human Resources Agency
Aberdeen Proving Ground, Md.
Barbara Panther

Command and Control Support Agency
Washington, D.C.
COL Timothy Buennemeyer

EEO and Civil Rights
Arlington, Va.
Norvell Dillard

Finance Command
Indianapolis, Ind.
COL Marlene S. Fey

Force Management Support Agency
Fort Belvoir, Va.
MG Rodney Anderson
SGM Ricardo Morales

Inspector General Agency
Arlington, Va.
LTG Steven Whitcomb

Installation Support Management Activity
Arlington, Va.
Craig College

Judge Advocate General's Legal Center and School
Charlottesville, Va.
BG(P) Dana K. Chipman
SGM Clyde J. Tate II

Legal Services Agency
Arlington, Va.
BG(P) Clyde J. Tate II

Logistics Innovation Agency
Fort Belvoir, Va.
Vic Ramdass

Human Resources Command
Alexandria, Va.
MG Sean J. Byrne
CSM John F. Gathers

U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.
BG William T. Wolf
CSM Tod Glidewell

U.S. Army Field Band
Fort Meade, Md.
COL Thomas Palmatier

U.S. Army Information Technology Agency
Arlington, Va.
Larry Stubblefield

U.S. Army Manpower Analysis Agency
Fort Belvoir, Va.
Ronald Bertha

U.S. Army Resources and Programs Agency
Arlington, Va.
Larry Stubblefield

FORCES COMMAND

Headquarters
Fort McPherson, Ga.
GEN Charles C. Campbell
CSM Dennis M. Carey

First U.S. Army
Fort Gillem, Ga.
LTG Thomas G. Miller
CSM Ronald T. Riling

First Army Division-East
Fort Meade, Md.
BG Michael Bednarek
CSM Marvell Dean

First Army Division-West
Fort Hood, Texas
MG Thomas Robinson
CSM Terry G. Young

I Corps
Fort Lewis, Wash.
LTG Charles H. Jacoby Jr.
CSM Frank A. Grippe

3rd Brigade Combat Team (BCT) (Stryker), 2nd Infantry Division
Fort Lewis, Wash.
COL David E. Funk
CSM Alan D. Bjerke

4th BCT (Stryker), 2nd Infantry Division
Fort Lewis, Wash.
COL John Norris
CSM Jeffery Huggins

5th BCT (Stryker), 2nd Infantry Division
Fort Lewis, Wash.
COL Harry D. Tunnell IV
CSM Robert A. Prosser

17th Fires Brigade
Fort Lewis, Wash.
COL Steven L. Bullimore
CSM Joseph Santos

42nd Military Police Brigade
Fort Lewis, Wash.
COL David P. Glaser
CSM Ed Dahl

62nd Medical Brigade
Fort Lewis, Wash.
COL John A. Powell
CSM Eugene Jeffers

201st Battlefield Surveillance Brigade
Fort Lewis, Wash.
COL Robert P. Whalen
CSM Mark Thornton

555th Engineer Brigade
Fort Lewis, Wash.
COL Randall L. Fofi
CSM Matthew A. Thomas

593rd Sustainment Brigade
Fort Lewis, Wash.
COL Cynthia L. Fox
CSM Daniel K. Verbeke

U.S. Army Garrison
Fort Lewis, Wash.
COL Thomas W. Brittain
CSM Matthew Barnes

III Corps
Fort Hood, Texas
LTG Ricky Lynch
CSM Neil Ciotola

1st Cavalry Division
Fort Hood, Texas
MG Daniel P. Bolger
CSM Rory L. Malloy

1st BCT (Heavy), 1st Cavalry Division
Fort Hood, Texas
COL Tobin L. Green
CSM James Norman

2nd BCT (Heavy), 1st Cavalry Division
Fort Hood, Texas
COL Ryan F. Gonsalves
CSM Jeffery A. Hof

3rd BCT (Heavy), 1st Cavalry Division
Fort Hood, Texas
COL Gary Volesky
CSM James Pippin

4th BCT (Heavy), 1st Cavalry Division
Fort Hood, Texas
COL Bryan Winski
CSM Edwin Rodriguez

1st Air Cavalry Brigade, 1st Cavalry Division
Fort Hood, Texas
COL Douglas M. Gabram
CSM Glen Vela

4th Infantry Division (Mechanized)
Fort Carson, Colo.
MG David G. Perkins
CSM Daniel A. Dailey

1st BCT (Heavy), 4th Infantry Division
Fort Hood, Texas
COL Jeff Martindale
CSM Gerald L. Kinloch

2nd BCT (Heavy), 4th Infantry Division
Fort Carson, Colo.
COL Henry A. Kievenaar III
CSM Frederick L. Thompson

3rd BCT (Heavy), 4th Infantry Division
Fort Carson, Colo.
COL James E. Rainey
CSM Miles S. Wilson

4th BCT (Infantry), 4th Infantry Division
Fort Carson, Colo.
COL Randy A. George
CSM Charles V. Sasser Jr.

Combat Aviation Brigade, 4th Infantry Division
Fort Hood, Texas
COL Patrick E. Tierney
CSM Archie L. Davis

43rd Sustainment Brigade
Fort Carson, Colo.
COL Edward M. Daly
CSM Randy S. Varner

214th Fires Brigade, 4th Infantry Division
Fort Sill, Okla.
COL Richard Cabery
CSM Mitchell Williams

3rd Armored Cavalry Regiment
Fort Hood, Texas
COL Reginald E. Allen
CSM Jonathan J. Hunt

13th Sustainment Command (Expeditionary)
Fort Hood, Texas
BG Paul L. Wentz
CSM Mark D. Joseph

1st Medical Brigade, 13th Sustainment Command
Fort Hood, Texas
COL Robert D. Tenhet
CSM Kevin B. Stuart

4th Sustainment Brigade, 13th Sustainment Command
Fort Hood, Texas
COL Ronald Kirklin
CSM Erik R. Frey

21st Cavalry Brigade
Fort Hood, Texas
COL Scott B. Thompson
CSM Frankie Woods

31st Air Defense Artillery Brigade
Fort Sill, Okla.
COL Daniel L. Karbler
CSM Garland J. Sullivan

36th Engineer Brigade
Fort Hood, Texas
COL Kent Savre
CSM Terence Murphy

41st Fires Brigade
Fort Hood, Texas
COL Richard M. Francey Jr.
CSM Kelvin A. Hughes

89th Military Police Brigade
Fort Hood, Texas
COL Mack Huey
CSM Mike Ashford

504th Battlefield Surveillance Brigade
Fort Hood, Texas
COL Robert P. Walters Jr.
CSM Nicholas Rozumny

13th Financial Management Center
Fort Hood, Texas
COL Lee Ransdell
CSM Barbara Maxwell

1st Infantry Division
Fort Riley, Kan.
MG Vincent K. Brooks
CSM James B. Champagne

1st BCT, 1st Infantry Division
Fort Riley, Kan.
COL Eric J. Wesley
CSM John Jones

2nd BCT (Heavy), 1st Infantry Division
Fort Riley, Kan.
COL Joseph M. Martin
CSM Donald L. Battle

3rd IBCT, 1st Infantry Division
Fort Hood, Texas
COL Christopher Toner
CSM Drew Pumarejo

4th IBCT, 1st Infantry Division
Fort Riley, Kan.
COL Henry A. Arnold
CSM Michael S. McCoy

Combat Aviation Brigade, 1st Infantry Division
Fort Riley, Kan.
COL Frank Muth
CSM Darrell Wallace

Sustainment Brigade, 1st Infantry Division
Fort Riley, Kan.
COL Donnie Walker
CSM Miguel Rivera

75th Fires Brigade
Fort Sill, Okla.
COL Joseph Harrington
CSM Tony O. Smith

4th Maneuver Enhancement Brigade
Fort Leonard Wood, Mo.
COL Robert Risberg
CSM Gregory Rodgers

XVIII Airborne Corps
Fort Bragg, N.C.
MG Daniel B. Allyn (Acting)
CSM Joseph R. Allen

3rd Infantry Division
Fort Stewart, Ga.
MG Anthony A. Cucolo III
CSM Jesse Andrews

1st BCT (Heavy), 3rd Infantry Division
Fort Stewart, Ga.
COL Roger L. Cloutier Jr.
CSM Edd Watson

2nd BCT (Heavy), 3rd Infantry Division
Fort Stewart, Ga.
COL Charles E.A. Sexton
CSM Valmond A. Martin

3rd BCT (Heavy), 3rd Infantry Division
Fort Benning, Ga.
COL Peter L. Jones
CSM James M. Pearson

4th BCT (Infantry), 3rd Infantry Division
Fort Stewart, Ga.
COL Louis J. Lartigue Jr.
CSM Louis M. Torres

Combat Aviation Brigade, 3rd Infantry Division
Hunter Army Airfield, Ga.
COL Donald N. Galli
CSM Richard Stidley

3rd Sustainment Brigade
Fort Stewart, Ga.
COL Shawn M. Morrissey
CSM Clifton H. Johnson

10th Mountain Division (Light Infantry)
Fort Drum, N.Y.
MG James L. Terry
CSM James W. Redmore

1st BCT (Infantry), 10th Mountain Division
Fort Drum, N.Y.
COL Willard M. Burleson
CSM Dennis E. Defreese

2nd BCT (Infantry), 10th Mountain Division
Fort Drum, N.Y.
COL David M. Miller
CSM Joseph A. Montour

3rd BCT (Infantry), 10th Mountain Division
Fort Drum, N.Y.
COL David B. Haight
CSM Delbert D. Byers

4th BCT (Infantry), 10th Mountain Division
Fort Polk, La.
COL Bruce P. Antonia
CSM Steven L. Womack

Combat Aviation Brigade, 10th Mountain Division
Fort Drum, N.Y.
COL Erik C. Peterson
CSM Kenneth E. Patton

10th Sustainment Brigade
Fort Drum, N.Y.
COL Mark E. Drake
CSM Allen G. Fritzsching

82nd Airborne Division
Fort Bragg, N.C.
MG Curtis M. Scaparrotti
CSM Thomas R. Capel

1st BCT (Infantry) (Airborne), 82nd Airborne Division
Fort Bragg, N.C.
COL Mark R. Stammer
CSM LaMarquis Knowles

2nd BCT (Infantry) (Airborne), 82nd Airborne Division
Fort Bragg, N.C.
COL Christopher Gibson
CSM Brian K. Meyers

3rd BCT (Infantry) (Airborne), 82nd Airborne Division
Fort Bragg, N.C.
COL Timothy P. McGuire
CSM King O. Parks

4th BCT (Infantry) (Airborne), 82nd Airborne Division
Fort Bragg, N.C.
COL Brian M. Drinkwine
CSM Richard R. Flowers

Combat Aviation Brigade, 82nd Airborne Division
Fort Bragg, N.C.
COL Paul T. Bricker
CSM Larry Farmer

18th Fires Brigade
Fort Bragg, N.C.
COL Wilson Shoffner
CSM Samuel Campbell

101st Airborne Division (Air Assault)
Fort Campbell, Ky.
MG John F. Campbell
CSM Vincent F. Camacho

1st BCT (Infantry), 101st Airborne Division
Fort Campbell, Ky.
COL Andrew P. Poppas
CSM Kevin R. Benson

2nd BCT (Infantry), 101st Airborne Division
Fort Campbell, Ky.
COL Arthur A. Kandarian
CSM Scott C. Schroeder

3rd BCT (Infantry), 101st Airborne Division
Fort Campbell, Ky.
COL Viet X. Luong
CSM Gregory E. Patton

4th BCT (Infantry), 101st Airborne Division
Fort Campbell, Ky.
COL Sean M. Jenkins
CSM Timothy D. Coop

101st Combat Aviation Brigade
Fort Campbell, Ky.
COL William K. Gayler
CSM Lebert Beharie

159th Combat Aviation Brigade
Fort Campbell, Ky.
COL Ronald F. Lewis
CSM John L. Chandler

101st Sustainment Brigade
Fort Campbell, Ky.
COL Michael P. Peterman
CSM Michael A. Sanchez

16th Military Police Brigade (Airborne)
Fort Bragg, N.C.
COL John F. Garrity
CSM Brian Lambert

18th Financial Management Center (Airborne)
Fort Bragg, N.C.
COL Michael Murfee
SGM Annie Walker

20th Engineer Brigade (Airborne)
Fort Bragg, N.C.
COL Richard Kaiser
CSM Butler J. Kendrick

44th Medical Brigade
Fort Bragg, N.C.
COL Ronald Maul
CSM Edwin Perez

108th Air Defense Artillery Brigade
Fort Bragg, N.C.
COL Christopher Spillman
CSM Richard Clem

525th Battlefield Surveillance Brigade
Fort Bragg, N.C.
COL James D. Edwards
CSM Roger N. Daigle Jr.

82nd Sustainment Brigade
Fort Bragg, N.C.
COL Skip O'Neil
CSM Barry E. Maieritsch

32nd Army Air Missile Defense Command
Fort Bliss, Texas
BG David L. Mann
CSM Sydney D. Weatherspoon

11th Air Defense Artillery Brigade
Fort Bliss, Texas
COL Joseph DeAntona
CSM Jimmie W. Nelson

20th Support Command (CBRNE)
Aberdeen Proving Ground, Md.
BG Jeffrey J. Snow
CSM Ronald E. Orosz

48th Chemical Brigade
Fort Hood, Texas
COL Eric W. Brigham
CSM Edwin D. Moten

52nd Ordnance Group
Fort Carson, Colo.
COL Thomas J. Langowski
CSM Robert L. Hockstedler

71st Ordnance Group
Fort Carson, Colo.
COL Patrick J. Kelly
CSM Thomas D. Gonzalez

National Training Center (NTC)
Fort Irwin, Calif.
BG Robert Abrams
CSM Victor Martinez

916th Support Brigade
Fort Irwin, Calif.
COL David B. Gaffney
CSM Ronnie Martinez

11th Armored Cavalry Regiment
Fort Irwin, Calif.
COL Paul J. Laughlin
CSM Martin E. Wilcox

Joint Readiness Training Center (JRTC)
Fort Polk, La.
BG James C. Yarbrough
CSM Christopher Greca

162nd Infantry Brigade
Fort Polk, La.
COL Mark Bertolini
CSM Billy R. Brauer

1st Maneuver Enhancement Brigade
Fort Polk, La.
COL Scott A. Spellman
CSM Arthur R. Vanwyngarden

Air Traffic Services Command
Fort Rucker, Ala.
COL Jon P. Goodsmith
CSM Ronaldo N. Ronsairo

164th Theater Airfield Operations Group
Fort Rucker, Ala.
COL Jon P. Goodsmith
CSM Ronaldo N. Ronsairo

69th Air Defense Artillery Brigade
Fort Hood, Texas
COL James H. Jenkins
CSM Tedd Pritchard

49th Quartermaster Group
Fort Lee, Va.
COL M.C. Stephen Cherry
CSM James K. Sims

1st BCT (Heavy), 1st Armored Division
Fort Bliss, Texas
COL Larry Swift
CSM James P. Daniels

3rd IBCT, 1st Armored Division
Fort Bliss, Texas
COL Christopher G. Cavoli
CSM Richard H. Capps

4th BCT, 1st Armored Division
Fort Bliss, Texas
COL Peter Newell
CSM Phillip D. Pandy

TRAINING AND DOCTRINE COMMAND

Headquarters
Fort Monroe, Va.
GEN Martin E. Dempsey
CSM David M. Bruner

Combined Arms Center
Fort Leavenworth, Kan.
LTG William B. Caldwell IV
CSM Philip F. Johndrow

Army Capabilities Integration Center
Fort Monroe, Va.
LTG Michael A. Vane

Combined Arms Support Command
Fort Lee, Va.
MG James E. Chambers
CSM C.C. Jenkins

Army Accessions Command
Fort Monroe, Va.
LTG Benjamin C. Freakley
CSM Dennis M. King

Accessions Support Brigade
Fort Knox, Ky.
COL Fred Johnson
CSM Tory Hendrieth

Army Recruiting Command
Fort Knox, Ky.
MG Don M. Campbell Jr.
CSM Stephan Frennier

1st Recruiting Brigade
Fort Meade, Md.
COL Frank R. Hall
CSM Todd Moore

2nd Recruiting Brigade
Redstone Arsenal, Ala.
COL Glenn Richie
CSM Donnel Daniels

3rd Recruiting Brigade
Fort Knox, Ky.
COL James Iacocca
CSM Todd J. Sherman

5th Recruiting Brigade
San Antonio, Texas
COL Robert Akam
CSM Michael Horner

6th Recruiting Brigade
Las Vegas, Nev.
COL Michael C. Howitz
CSM Israel Talamantez

Medical Recruiting Brigade
Fort Knox, Ky.
COL Rafael C. Montagno
CSM Luther Legg

Mission Support Element
Fort Knox, Ky.
LTC (P) Edward R. Gallowitz
CSM Jeffrey Ingram

Army Cadet Command
Fort Monroe, Va.
MG Arthur M. Bartell
CSM Hershel L. Turner

1st ROTC Brigade
Fort Knox, Ky.
COL David S. Hubner
SGM Charles Green

2nd ROTC Brigade
Fort Drum, N.Y.
COL Glenn H. Goldman
SGM Kevin L. Goetz

3rd ROTC Brigade
Fort Belvoir, Va.
COL Sharon L. Wisniewski
SGM James A. Kennedy

4th ROTC Brigade
Fort Bragg, N.C.
COL Ronald P. Elrod
SGM Kevin T. Watson

5th ROTC Brigade
Fort Sam Houston, Texas
COL Versalle F. Washington
SGM Lamar D. Walker

6th ROTC Brigade
Hunter Army Airfield, Ga.
COL Francisco R. Betancourt
SGM Edward R. Armstrong

7th ROTC Brigade
Fort Knox, Ky.
COL Renee T. Finnegan
SGM Marion S. Fawbush

8th ROTC Brigade
Fort Lewis, Wash.
COL Paul J. Wood
SGM Isaia T. Vimoto

Adjutant General School
Fort Jackson, S.C.
COL Robert L. Manning
CSM Darlene C. Hagood

Air Defense Artillery School
Fort Sill, Okla.
BG Roger F. Mathews
CSM James T. Carr

Armor Center and School
Fort Knox, Ky.
MG James Milano
CSM John Troxell

Army Fires Center of Excellence
Fort Sill, Okla.
MG David D. Halverson
CSM Joseph D. Smith

Army Maneuver Support Center
Fort Leonard Wood, Mo.
MG Gregg Martin
CSM Corbly Elsbury

Army Training Support Center
Fort Eustis, Va.
Luciano Iorizzo
SGM Billy Chaney

Army War College
Carlisle Barracks, Pa.
MG Robert M. Williams
CSM Jose Powell

Aviation Warfighting Center
Fort Rucker, Ala.
BG James Barclay
CSM Tod Glidewell

Aviation Logistics School
Fort Eustis, Va.
COL William W. Braley Sr.
CSM Anthony Samuels

Basic Combat Training Center of Excellence
Fort Jackson, S.C.
BG Bradley W. May
CSM Brian M. Stall

Chaplain Center and School
Fort Jackson, S.C.
Ch. (COL) Samuel J.T. Boone
CSM Marylena McCrimmon

Chemical School
Fort Leonard Wood, Mo.
COL(P) Leslie Smith
CSM Ted Lopez

Command and General Staff College
Fort Leavenworth, Kan.
LTG William B. Caldwell IV
BG Edward C. Cardon (Deputy Commandant)

Defense Language Institute Foreign Language Center
Presidio of Monterey, Calif.
COL Sue Sandusky
CSM Kenneth Clark

Engineer School
Fort Leonard Wood, Mo.
COL (P) Bryan Watson
CSM Robert Wells

Field Artillery School
Fort Sill, Okla.
BG Ross E. Ridge
CSM Daniel R. Willey

Finance Management School
Fort Jackson, S.C.
COL Milton Sawyers
CSM Thomas L. Brown

Infantry Center and School
Fort Benning, Ga.
MG Michael Ferriter
CSM Early L. Rice

Intelligence Center and School
Fort Huachuca, Ariz.
MG John M. Custer
CSM Gerardus Wykoff

Logistics Management College
Fort Lee, Va.
COL Shelley Richardson
1SG Reneah Porter

Military Police School
Fort Leonard Wood, Mo.
BG David Phillips
CSM Charles Kirkland

Operations Group, JRTC
Fort Polk, La.
COL Jon S. Lehr
CSM Robert Gallagher

Operations Group, NTC
Fort Irwin, Calif.
COL Ted Martin
CSM Bernard L. Knight

Ordnance Center and Schools
Fort Lee, Va.
BG Lynn A. Collyar
CSM Daniel A. Eubanks

Ordnance Munitions and Electronics Maintenance School
Redstone Arsenal, Ala.
COL Howard (Lee) L. Merritt
CSM Angel C. Clark-Davis

Ordnance Mechanical Maintenance School
Aberdeen Proving Ground, Md.
COL Dan Reilly
SGM Jerry L. McIntire (Acting)

Quartermaster Center and School
Fort Lee, Va.
COL Jesse R. Cross
CSM Nathan J. Hunt

Recruiting and Retention School
Fort Jackson, S.C.
COL James H. Comish
CSM Jack M. Moody

Sergeants Major Academy
Fort Bliss, Texas
CSM Raymond F. Chandler

Signal Center and School
Fort Gordon, Ga.
BG Jeffrey W. Foley
CSM Thomas J. Clark

Soldier Support Institute
Fort Jackson, S.C.
COL Mark A. McAlister
CSM Billy J. Blackmon

TRADOC Analysis Center
Fort Leavenworth, Kan.
Michael F. Bauman

Transportation Center and School
Fort Eustis, Va.
BG Brian R. Layer
CSM Dwayne B. Perry

Warrant Officer Career Center
Fort Rucker, Ala.
COL Mark Jones
CW05 Charles Wigglesworth

Western Hemisphere Institute for Security Cooperation
Fort Benning, Ga.
COL Felix L. Santiago
CSM Julio Candelario

ARMY MATERIEL COMMAND

Headquarters
Fort Belvoir, Va.
GEN Ann E. Dunwoody
CSM Jeffrey J. Mellinger

Army Contracting Command
Fort Belvoir, Va.
Jeffrey P. Parsons
CSM Tony L. Baker

Army Sustainment Command
Rock Island Arsenal, Ill.
MG Yves J. Fontaine
CSM Stephen D. Blake

Aviation and Missile Life Cycle Management Command
Redstone Arsenal, Ala.
MG James R. Myles
CSM Ricky P. Yates

CECOM Life Cycle Management Command
Fort Monmouth, N.J.
MG Randolph P. Strong
CSM Tyrone Johnson

Chemical Materials Agency
Aberdeen Proving Ground, Md.
Conrad F. Whyne
SGM Ricardo Soto-Acevedo

Joint Munitions Command
Rock Island Arsenal, Ill.
BG Larry Wyche
SGM David M. Puig

Joint Munitions and Lethality Life Cycle Management Command
Picatinny Arsenal, N.J.
BG Larry Wyche (Acting)
(Vacant)

Military Surface Deployment and Distribution Command
Scott AFB, Ill.
MG James L. Hodge
CSM Tomás R. Hawkins

Research, Development and Engineering Command
Aberdeen Proving Ground, Md.
MG Paul S. Izzo
CSM Hector G. Marin

Security Assistance Command
Fort Belvoir, Va.
BG Christopher Tucker
SGM William L. Kaundart

TACOM Life Cycle Management Command
Warren, Mich.
MG Scott G. West
CSM Otis N. Cuffee

U.S. ARMY EUROPE

USAREUR & Seventh Army
Heidelberg, Germany
GEN Carter F. Ham
CSM Ralph R. Beam

V Corps
Heidelberg, Germany
BG Michael Ryan
CSM Roger P. Blackwood

1st Armored Division
Wiesbaden, Germany
MG Terry Wolff
CSM William M. Johnson Jr.

2nd BCT, 1st Armored Division
Baumholder, Germany
COL Patrick Matlock
CSM Michael P. Eyer

172nd Infantry Brigade
Grafenwöhr, Germany
COL Jeffrey A. Sinclair
CSM Steven W. McClaflin

2nd Cavalry Regiment (Stryker)
Vilseck, Germany
COL James R. Blackburn
CSM Mark A. Morris

12th Combat Aviation Brigade
Katterbach, Germany
COL Robert C. Doerer
CSM Lee Kennedy

357th Air and Missile Defense Detachment
Kaiserslautern, Germany
COL Anthony English
CSM Bryan E. McGhee

21st Theater Sustainment Command
Kaiserslautern, Germany
BG Patricia E. McQuistion
CSM David D. Wood

7th Civil Support Command
Kaiserslautern, Germany
BG Jon J. Miller
CSM David S. Stading

16th Sustainment Brigade
Bamberg, Germany
COL Martin B. Pitts
CSM James E. Spencer

18th Engineer Brigade
Schwetzingen, Germany
COL Matthew H. Russell
CSM David M. Clark

18th Military Police Brigade
Mannheim, Germany
COL Thomas P. Evans
CSM Brenda K. Curfman

266th Finance Center
Kaiserslautern, Germany
COL Luis Crespo
SGM James K. Ledbetter

405th Army Field Support Brigade
Seckenheim, Germany
COL John F. (Jack) Haley
CSM Ismael Rodriguez

U.S. Army Southern European Task Force-U.S. Army Africa
Vicenza, Italy
MG William B. Garrett III
CSM Jerome Bronson

173rd Airborne Brigade Combat Team
Vicenza, Italy
COL James H. Johnson III
CSM Nicholas A. Rolling

Seventh Army Joint Multinational Training Command
Grafenwöhr, Germany
BG Steven Salazar
CSM Darieus A. ZaGara

U.S. Army Joint Multinational Readiness Center
Hohenfels, Germany
COL Charles Preysler
CSM Frank Graham

5th Signal Command
Wiesbaden, Germany
BG Jeffrey G. Smith Jr.
CSM Marilyn Washington

2nd Signal Brigade
Mannheim, Germany
COL Gerald H. Miller
CSM Patrick Brooks

7th Signal Brigade
Mannheim, Germany
COL Randall W. Bland
CSM Terence Farmer

66th Military Intelligence Brigade
Darmstadt, Germany
COL Napoleon Stewart
CSM David Redmon

202nd Military Police Group (CID)
Seckenheim, Germany
COL Jeffrey T. Harris
CSM Drew Underwood

U.S. Army Europe Regional Medical Command
Heidelberg, Germany
BG Keith W. Gallagher
CSM Frances Rivera

30th Medical Command
Heidelberg, Germany
COL Dennis D. Doyle
CSM Christopher Walls

Heidelberg Medical Department Activity
Heidelberg, Germany
COL Paula K. Underwood
CSM Michael S. Mullen

Landstuhl Regional Medical Center
Landstuhl, Germany
COL John M. Cho
CSM Benjamin H. Scott

Bavaria Medical Department Activity
Vilseck, Germany
COL Stephen J. Brewster
CSM Jayme D. Johnson

U.S. Army Center for Health Promotion and Preventive Medicine-Europe
Landstuhl, Germany
COL Robert G. Webb
SGM Brent E. Albertson

U.S. Army Medical Materiel Center-Europe
Pirmasens, Germany
COL Mitchell E. Brew
MSG Juan C. Villaman

U.S. Army Europe Regional Veterinary Command
Heidelberg, Germany
COL Leslie G. Huck
MSG Michael D. Brock

U.S. Army Regional Dental Command
Heidelberg, Germany
COL Randall N. Ball
SGM Sandra M. Trinidad

U.S. Army Contracting Command-Europe
Seckenheim, Germany
COL Debra D. Daniels
SGM Bentura Fernandez

Task Force Falcon
Camp Bondsteel, Kosovo
BG Keith D. Jones
CSM Rod Whittle

THIRD ARMY/ U.S. ARMY CENTRAL

Headquarters
Fort McPherson, Ga.
LTG William G. Webster Jr.
CSM John D. Fourhman

Area Support Group-Kuwait
Camp Arifjan, Kuwait
COL Christopher K. Hoffman
CSM Don W. Harbin

Area Support Group-Qatar
Camp As Sayliyah, Qatar
COL Maxine C. Girard
CSM Michael D. Howard

U.S. ARMY NORTH/FIFTH ARMY

Headquarters
Fort Sam Houston, Texas
LTG Thomas R. Turner II
CSM George L. Nieves

U.S. ARMY SOUTH

Headquarters
Fort Sam Houston, Texas
MG Keith M. Huber
CSM Armando Ramirez

U.S. ARMY PACIFIC

Headquarters
Fort Shafter, Hawaii
LTG Benjamin R. Mixon
CSM Joseph P. Zettlemoyer

25th Infantry Division
Schofield Barracks, Hawaii
MG Robert L. Caslen Jr.
CSM Frank Leota

2nd BCT (Stryker), 25th Infantry Division
Schofield Barracks, Hawaii
COL Malcolm B. Frost
CSM William Hain

3rd BCT (Infantry), 25th Infantry Division
Schofield Barracks, Hawaii
COL Walter E. Piatt
CSM Anthony Marrero

Combat Aviation Brigade 25th Infantry Division
Wheeler Army Airfield, Hawaii
COL Michael Lundy
CSM Jesus Ruiz

8th Theater Sustainment Command
Schofield Barracks, Hawaii
BG Michael J. Terry
CSM George D. Duncan

45th Sustainment Brigade
Schofield Barracks, Hawaii
COL Clay Hatcher
CSM Benjamin Ramos

10th Area Support Group
Torii Station, Okinawa, Japan
COL James Woodard
CSM Larry Donaldson

8th Military Police Brigade
Schofield Barracks, Hawaii
COL Byron A. Freeman
CSM Norwood L. Patterson III

130th Engineer Brigade
Schofield Barracks, Hawaii
COL Fabian E. Mendoza
CSM Dale A. Moran

311th Signal Command
Fort Shafter, Hawaii
BG Alan R. Lynn
CSM Stephfon Watson

516th Signal Brigade
Fort Shafter, Hawaii
COL Bruce T. Crawford
CSM Kennis Dent

94th Army Air & Missile Defense Command
Fort Shafter, Hawaii
COL (P) Jeffery Underhill
CSM Phillip R. Rowland

18th Medical Command
Fort Shafter, Hawaii
LTC Chadwick Bowers
CSM Timothy Shelton

500th Military Intelligence Brigade
Schofield Barracks, Hawaii
COL Chris Ballard
CSM Jeffery Fairley

196th Infantry Brigade (Training Support)
Fort Shafter, Hawaii
COL James George
CSM Joseph H. Uncangco

413th Contracting Support Brigade
Fort Shafter, Hawaii
COL Michael Hoskin
MSG Marlon Cooper (SEA)

U.S. Army Japan/I Corps FWD
Camp Zama, Japan
MG Francis J. Wiercinski
CSM William P. Franklin

U.S. Army Alaska
Fort Richardson, Alaska
MG William Troy
CSM David Turnbull

1st BCT (Stryker), 25th Infantry Division
Fort Wainwright, Alaska
COL Burdett K. Thompson
CSM Gabriel Cervantes

4th BCT (Airborne), 25th Infantry Division
Fort Richardson, Alaska
COL Michael L. Howard
CSM Dennis C. Zavodsky

Aviation Task Force 49
Fort Wainwright, Alaska
COL Robert W. Werthman
CSM Richard A. Mitchell

Installation Management Command-Pacific Region
Fort Shafter, Hawaii
Debra D. Zedalis, Director
CSM Bruce D. Roberts

U.S. Army Garrison, Hawaii
Wheeler Army Airfield, Hawaii
COL Matthew Margotta
CSM Robert E. Williamson III

U.S. Army Garrison, Japan
Camp Zama, Japan
COL Perry Helton
CSM Scarlet Stabel

U.S. Army Garrison
Fort Richardson, Alaska
COL Timothy Prior
CSM Richard A. Watson

U.S. Army Garrison, Fort Greely
Fort Greely, Alaska
LTC Chris W. Chronis
CSM Carolyn E. Reynolds

U.S. Army Garrison, Fort Wainwright
Fort Wainwright, Alaska
COL Timothy A. Jones
CSM Todd E. Wentland

ARMY SPECIAL OPERATIONS COMMAND

Headquarters
Fort Bragg, N.C.
LTG John F. Mulholland Jr.
CSM Parry L. Baer

U.S. Army Special Forces Command (Airborne)
Fort Bragg, N.C.
BG Michael S. Repass
CSM Mario G. Vigil

1st Special Forces Group (Airborne)
Fort Lewis, Wash.
COL Randolph R. Binford
CSM Jeffrey D. Stigall

3rd Special Forces Group (Airborne)
Fort Bragg, N.C.
COL Gus Benton II
CSM Terry L. Peters

5th Special Forces Group (Airborne)
Fort Campbell, Ky.
COL Mark Mitchell
CSM Anthony A. Pettengill

7th Special Forces Group (Airborne)
Fort Bragg, N.C.
COL James E. Kraft
CSM George Bequer

10th Special Forces Group (Airborne)
Fort Carson, Colo.
COL Sean Swindell
CSM Frank Socha

19th Special Forces Group (Airborne) (National Guard)
Draper, Utah
COL Michael D. Turello
CSM Scott A. Morgan

20th Special Forces Group (Airborne) (National Guard)
Birmingham, Ala.
COL Randall M. Zeegers
CSM Connie Grant

JFK Special Warfare Center and School
Fort Bragg, N.C.
MG Thomas R. Csrnko
CSM Charles Sekelsky

1st Special Warfare Training Group (Airborne)
Fort Bragg, N.C.
COL Jack Jenson
CSM Gary Koenitzer

Special Warfare Medical Group (Airborne)
Fort Bragg, N.C.
COL Jeffrey L. Kingsbury
CSM Frank Gilliand

95th Civil Affairs Brigade (Airborne)
Fort Bragg, N.C.
COL Michael Warmack
CSM Tom Wall

4th Psychological Operations Group (Airborne)
Fort Bragg, N.C.
COL Carl Phillips
CSM Fernan T. Castelo

528th Sustainment Brigade (Airborne)
Fort Bragg, N.C.
COL Lenny J. Kness
CSM Charles Tobin

112th Special Operations Signal Battalion (Airborne)
Fort Bragg, N.C.
LTC Samuel Anderson
CSM Allan K. Fairley

75th Ranger Regiment
Fort Benning, Ga.
COL Michael E. Kurrilla
CSM James C. Hardy

160th Special Operations Aviation Regiment (Airborne)
Fort Campbell, Ky.
COL Clayton M. Hutmacher
CSM David L. Leamon

EIGHTH ARMY

Headquarters
Seoul, South Korea
LTG Joseph F. Fil Jr.
CSM Robert A. Winzenried

2nd Infantry Division
U.S. Army Garrison (USAG) Red Cloud, South Korea
MG Michael S. Tucker
CSM Peter D. Burrowes

1st Heavy Brigade Combat Team, 2nd Infantry Division
USAG Hovey, South Korea
COL Thomas C. Graves
CSM John W. Fortune

2nd Combat Aviation Brigade, 2nd Infantry Division
USAG Humphreys, South Korea
COL Joseph A. Bassani
CSM Richard E. Santos

210th Fires Brigade, 2nd Infantry Division
USAG Casey, South Korea
COL Steven A. Sliwa
CSM Antoine C. Denson

65th Medical Brigade
Seoul, South Korea
COL Jeffrey W. Clark
CSM Miguel A. Guante-Rojas

19th Sustainment Command (Expeditionary)
Daegu, South Korea
BG Thomas A. Harvey
CSM Brian S. Connie

501st Sustainment Brigade
USAG Red Cloud, South Korea
COL Kathryn A. Burba
CSM Clinton G. Hall

501st Military Intelligence Brigade
Seoul, South Korea
COL Raul E. Escribano
CSM John R. Plaster

Materiel Support Center-Korea
USAG Carroll, South Korea
COL Phillip A. Mead
Brian McClenning

35th Air Defense Artillery Brigade
Osan Air Force Base, South Korea
COL Brian P. Dunn
CSM Jerome Wiggins

1st Signal Brigade
Yongsan, South Korea
COL Welton Chase Jr.
CSM Rudolph Johnson

411th Contracting Support Brigade
Yongsan, South Korea
COL Daniel T. Cottrell
MSG Samuel Cox

175th Financial Management Center
Yongsan, South Korea
COL Carolyn R. Sharpe

Installation Management Command
Seoul, South Korea
BG John Uberti
CSM Kevin N. Witt

U.S. Army Garrison-Red Cloud
Uijeongbu,South Korea
COL Larry A. Jackson
CSM Earlene Y. Lavender

U.S. Army Garrison-Yongsan
Seoul, South Korea
COL David W. Hall
CSM Ralph J. Rusch

U.S. Army Garrison-Humphreys
South Korea
COL Joseph P. Moore
SGM Jason K. Kim

U.S. Army Garrison-Daegu
Camp Henry, South Korea
COL Terry D. Hodges
CSM David R. Abbott

ARMY SPACE AND MISSILE DEFENSE COMMAND/ ARMY FORCES STRATEGIC COMMAND

Headquarters
Redstone Arsenal, Ala.
LTG Kevin T. Campbell
CSM Ralph C. Borja

Deputy to the Commander for Research, Development and Acquisition
Redstone Arsenal, Ala.
Steven L. Messervy

Deputy Commander (Operations)
Peterson Air Force Base, Colo.
BG Kurt S. Story

Office of the Chief Scientist
Redstone Arsenal, Ala.
Mark L. Swinson

1st Space Brigade
Colorado Springs, Colo.
COL Jeffrey A. Farnsworth
CSM Kevin B. McGovern

100th Missile Defense Brigade Ground-based Midcourse Defense
Peterson Air Force Base, Colo.
COL Gregory S. Bowen
CSM Joseph B. Rhodes

Army Astronaut Detachment
Johnson Space Center, Houston, Texas
COL Timothy J. Creamer

Ballistic Missile Defense System Manager
Arlington, Va.
COL Mark S. McConkey

Space and Missile Defense Technical Center
Redstone Arsenal, Ala.
Rodney L. Robertson

Space and Missile Defense Future Warfare Center
Redstone Arsenal, Ala.
Laurence H. Burger

Technical Interoperability and Matrix Center
Redstone Arsenal, Ala.
Debra G. Wymer

High-Energy Laser Systems Test Facility
White Sands Missile Range, N.M.
William Sutton (Acting)

U.S. Army Kwajalein Atoll and Ronald Reagan Ballistic Missile Defense Test Site
Republic of the Marshall Islands
COL Frederick S. Clarke

MILITARY SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND

Headquarters
Scott AFB, Ill.
MG James L. Hodge
CSM Tomás Hawkins

595th Transportation Group-Forward
Camp Arifjan, Kuwait
COL Dennis Harber
CSM Lavon M. Christien

596th Transportation Group
Sunny Point, N.C.
COL Mark Hagan

597th Transportation Group
Fort Eustis, Va.
COL Jeff Helmick
CSM Tony Baker

598th Transportation Group
Rotterdam, The Netherlands
COL Stephen E. Farmen
CSM James Riddick

599th Transportation Group
Wheeler Army Airfield, Hawaii
COL Joel Taylor
CSM Steven R. Oldham

Transportation Engineering Agency
Scott AFB, Ill.
Mike Williams

U.S. ARMY ACQUISITION SUPPORT CENTER

Headquarters
Fort Belvoir, Va.
Craig A. Spisak

CORPS OF ENGINEERS

Headquarters
Washington, D.C.
LTG Robert L. Van Antwerp
MG Don T. Riley (Deputy Commander)
CSM Micheal L. Buxbaum

Deputy Commanding General for Military and International Operations
MG Jeffrey J. Dorko

Deputy Commanding General for Civil and Emergency Operations
MG Meredith W.B. (Bo) Temple

Director of Military Programs
J. Joseph (Joe) Tyler

Director of Civil Works
Steven L. Stockton

Great Lakes and Ohio River Division
Cincinnati, Ohio
MG John W. Peabody

Mississippi Valley Division
Vicksburg, Miss.
BG Michael J. Walsh

North Atlantic Division
New York, N.Y.
COL Peter (Duke) A. DeLuca

Northwestern Division
Portland, Ore.
BG William E. Rapp

Pacific Ocean Division
Honolulu, Hawaii
BG Mark W. Yenter

South Atlantic Division
Atlanta, Ga.
BG Todd T. Semonite

South Pacific Division
San Francisco, Calif.
COL Scott (Rock) F. Donahue

Southwestern Division
Dallas, Texas
BG John R. McMahon

Transatlantic Division
Winchester, Va.
BG Kendall Cox

Engineering Research and Development Center
Vicksburg, Miss.
COL Gary E. Johnston

Huntsville Engineering and Support Center
Huntsville, Ala.
COL Nello Tortora

249th Engineer Battalion (Prime Power)
Fort Belvoir, Va.
LTC Matthew R. Tyler

CRIMINAL INVESTIGATION COMMAND

Headquarters
Fort Belvoir, Va.
BG Rodney L. Johnson
CSM Leslie B. Koonce

3rd Military Police Group (CID)
Fort Gillem, Ga.
COL Jeffrey S. Davies
CSM John F. Schoenrock

6th Military Police Group (CID)
Fort Lewis, Wash.
COL Tom Tatum
CSM Timothy S. Fitzgerald

202nd Military Police Group (CID)
Seckenheim, Germany
COL Jeffery Harris
CSM Drew Underwood

701st Military Police Group (CID)
Fort Belvoir, Va.
COL Robert Q. Ake
CSM Paul W. McDonald

U.S. Army Crime Records Center
Fort Belvoir, Va.
Phillip J. McGuire

U.S. Army Criminal Investigation Laboratory
Fort Gillem, Ga.
Larry C. Chelko

INSTALLATION MANAGEMENT COMMAND

Headquarters
Arlington, Va.
LTG Robert Wilson
BG Al Aycock (Deputy Commander)
John B. Nerger, SES (Executive Director)
CSM John M. Gaines Jr.

Family and Morale, Welfare and Recreation Command
Alexandria, Va.
BG Reuben Jones
CSM Abe Vega

Army Environmental Command
Aberdeen Proving Ground, Md.
COL Maria R. Gervais

NATIONAL CAPITAL REGION–DISTRICT
BG Dennis E. Rogers

U.S. Army Garrison (USAG)
Fort Belvoir, Va.
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Fort Sam Houston, Texas
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(Vacant)

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Fort Meade, Md.
MG Adolph McQueen
CSM Brendan R. Toth

11th Military Police Brigade
Ashley, Pa.
BG Robert W. Kenyon
CSM Thomas H. LeGare

300th Military Police Brigade
Inkster, Mich.
COL Therese M. Obrien
CSM Ted L. Copeland

800th Military Police Brigade
Uniondale, N.Y.
BG John E. Cornelius
CSM Patrick Scanlon

3rd Medical Command (MDSC)
Decatur, Ga.
MG Dean G. Sienko
CSM James M. Lambert

8th Medical Brigade
Staten Island, N.Y.
(Vacant)
CSM Michael J. Bolduc

804th Medical Command
Fort Devens, Mass.
BG Oscar S. DePriest IV
CSM Hersey Brian Henderson

807th Medical Command
Salt Lake City, Utah
MG Lie Ping Chang
CSM Michael J. Gallucci

331st Medical Group
Wichita, Kan.
COL William W. Burgin
CSM Doretta J. Ward

2nd Medical Brigade
San Pablo, Calif.
COL Odis R. Blueitt
CSM Robert J. Ramirez

330th Medical Brigade
Fort Sheridan, Ill.
BG Jonathan Woodson
CSM Arlindo F. Almeida

75th Battle Command Training Division
Ellington Field, Texas
MG Eldon P. Regua
CSM Paul A. Belanger

1st Brigade, 75th Division
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CSM Pascual Castro

2nd Brigade, 75th Division
Fort Dix, N.J.
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CSM Darrin Wiser

3rd Brigade, 75th Division
Fort Sheridan, Ill.
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CSM Thomas Salas

4th Brigade, 75th Division
Birmingham, Ala.
BG David W. Puster
CSM Luther Thomas

5th Brigade, 75th Division
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CSM Darby Reid

85th USAR Support Command (West)
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87th USAR Support Command (East)
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(Vacant)

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CSM Neil Heupel

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(Vacant)

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CSM Anthony T. Morrow

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Director/CEO Phil Sakowitz
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CSM Gerald Miller

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Fort Richardson, Alaska
COL David W. Osborn
CSM Daniel Goodwin

38th Troop Command
Fort Richardson, Alaska
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CSM Pamela Harrington

28th Infantry Division
Harrisburg, Pa.
MG Randall R. Marchi
CSM Brian Todero

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Washington, Pa.
COL Regis Allen Cardiff
CSM Horace Pysher

55th Brigade, 28th Infantry Division
Scranton, Pa.
COL Wilbur Wolf
CSM Wade Heilman

56th Brigade (Stryker), 28th Infantry Division
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COL Marc Ferraro
CSM John Jones

Aviation Brigade, 28th Infantry Division
Annville, Pa.
COL Teresa Ann Gallagher
CSM Michael Foster Wevodau

29th Infantry Division (Light)
Fort Belvoir, Va.
MG Grant Hayden
CSM Dennis A. Green

26th BCT (Infantry), 29th Infantry Division
Springfield, Mass.
COL Gregory MacDonald
CSM William Davidson

58th BCT (Infantry), 29th Infantry Division
Pikesville Military Reservation, Md.
COL Charles W. Whittington
CSM Leroy C. Hill

116th BCT (Infantry), 29th Infantry Division
Staunton, Va.
COL William Phillips II
CSM Carl Holcomb

Combat Aviation Brigade, 29th Infantry Division
Aberdeen Proving Ground, Md.
COL Timothy E. Gowen
CSM Thomas B. Beyard

34th Infantry Division
Rosemount, Minn.
MG Richard Nash
CSM Douglas Julin

1st BCT (Heavy), 34th Infantry Division
Stillwater, Minn.
COL Kevin C. Gutknecht
CSM Paul E. Herr

2nd BCT (Heavy), 34th Infantry Division
Boone, Iowa
COL Thomas H. Staton
CSM Craig R. Berte

Combat Aviation Brigade, 34th Infantry Division
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COL Roy Brock
CSM Bery Thesing

141st Maneuver Enhancement Brigade
Bismark, N.D.
COL Robert R. Wahon Jr.
CSM Guy V. Boschee

35th Infantry Division
Fort Leavenworth, Kan.
MG Marvin Pearson
CSM Dennis Taylor

33rd Infantry Brigade
Decatur, Ill.
COL Scott Thoele
CSM Mark Bowman

149th Maneuver Enhancement Brigade
Louisville, Ky.
COL Scott A. Campbell
CSM Thomas L. Johnson

Combat Aviation Brigade, 35th Infantry Division
Warrensburg, Mo.
COL John M. Anderson
CSM Robert H. Maze Jr.

Engineer Brigade, 35th Infantry Division
Fort Leonard Wood, Mo.
MG David F. Irwin
CSM Ray Harding

36th Infantry Division
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MG Eddy Spurgin
CSM Wilson L. Early

56th BCT (Infantry), 36th Infantry Division
Fort Worth, Texas
COL Samuel L. Henry
CSM John M. Morgan

72nd BCT (Infantry), 36th Infantry Division
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CSM Alfred Cordova

Combat Aviation Brigade, 36th Infantry Division
Austin, Texas
COL Clyde Shultz

176th Engineer Brigade, 36th Infantry Division
Austin, Texas
COL Lester Simpson
CSM Richard L. Milford

136th Maneuver Enhancement Brigade, 36th Infantry Division
Austin, Texas
COL Stephen G. Sanders
CSM Leodard Ruiz

38th Infantry Division
Indianapolis, Ind.
MG Tod J. Carmony
CSM Michael L. Lucas

37th BCT (Infantry), 38th Infantry Division
Akron-Canton, Ohio
COL Richard Curry
CSM Albert Whatmough

Combat Aviation Brigade, 38th Infantry Division
Shelbyville, Ind.
COL David Wood
CSM John Watson

40th Infantry Division
Los Alamitos, Calif.
MG John Harrell
CSM George Pena

2nd Brigade, 40th Infantry Division
San Diego, Calif.
COL David Baldwin
CSM Robert Whittle

Combat Aviation Brigade, 40th Infantry Division
Fresno, Calif.
COL Bernd Willand
CSM Richard Wall

42nd Infantry Division
Troy, N.Y.
BG Paul C. Genereux Jr.
CSM Robert Jenks Jr.

50th BCT (Infantry), 42nd Infantry Division
Lawrenceville, N.J.
COL Steve Ferrari
CSM David Kenna

86th BCT (Infantry), 42nd Infantry Division
Montpelier, Vt.
COL Williams Roy
CSM Forest Glodgett

Combat Aviation Brigade, 42nd Infantry Division
Latham, N.Y.
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CSM Justin Cappon

27th Infantry Brigade (Separate)
Syracuse, N.Y.
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CSM David Piwowarski

29th Infantry Brigade (Separate)
Honolulu, Hawaii
COL Bruce Oliveria
CSM Edgardo Coronado

30th Infantry Brigade (Separate)
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CSM Thomas Henry

32nd Infantry Brigade (Separate)
Camp Douglas, Wis.
COL Steve Bensend
CSM Edgar Hansen

39th Infantry Brigade (Separate)
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COL Kendall Penn
CSM Steve Veazey

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Tigard, Ore.
COL Daniel Hokanson
CSM Michael Storm

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Edmond, Okla.
COL Lawrence I. Fleishman
CSM Jeff Mapes

48th Infantry Brigade (Separate)
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COL Lee Durham
CSM Michael Hurndon

218th Maneuver Enhancement Brigade
Newberry, S.C.
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CSM Michael Kirkland

53rd Infantry Brigade (Light) (Separate)
Tampa, Fla.
COL Richard Gallant
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Seattle, Wash.
COL Ron Kapral
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Boise, Idaho
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CSM Tong Riggs

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103rd Field Artillery Brigade
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CSM Richard Lafond

115th Fires Brigade
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197th Fires Brigade
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263rd Army Air and Missile Defense Command
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CSM Van Mullinax

164th Air Defense Artillery Brigade
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CSM David W. Eden

63rd Aviation Group
Frankfort, Ky.
COL Aaron T. Barrier
CSM Mark Newby

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COL Karen Gattis
CSM Lawrence C. Johnson Jr.

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Jackson, Miss.
COL Gregory L. Kennedy
CSM George M. Miller

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COL Dana R. Yetton
CSM James Baker

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CSM David Ruelas

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CSM Neal Purvis

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CSM Ray Harding

194th Engineer Brigade
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CSM Charles Hudson

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CSM Joseph Diniz

46th Military Police Command
Lansing, Mich.
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CSM Daniel Lincoln

177th Military Police Brigade
Taylor, Mich.
BG Michael Nevin
CSM Richard Michael

260th Military Police Command
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CSM Michael Collins

228th Signal Brigade
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Kenneth Ault
Robert Strouse

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Curtis Loop

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Sherman Reed

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Alvin Jones
William McCulloch

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Kay Schwendiman
Paul Swenson

Vermont
John des Groseilliers

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Richard Collier
Michael Kavanaugh

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Wyoming
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ASSOCIATION OF THE UNITED STATES ARMY

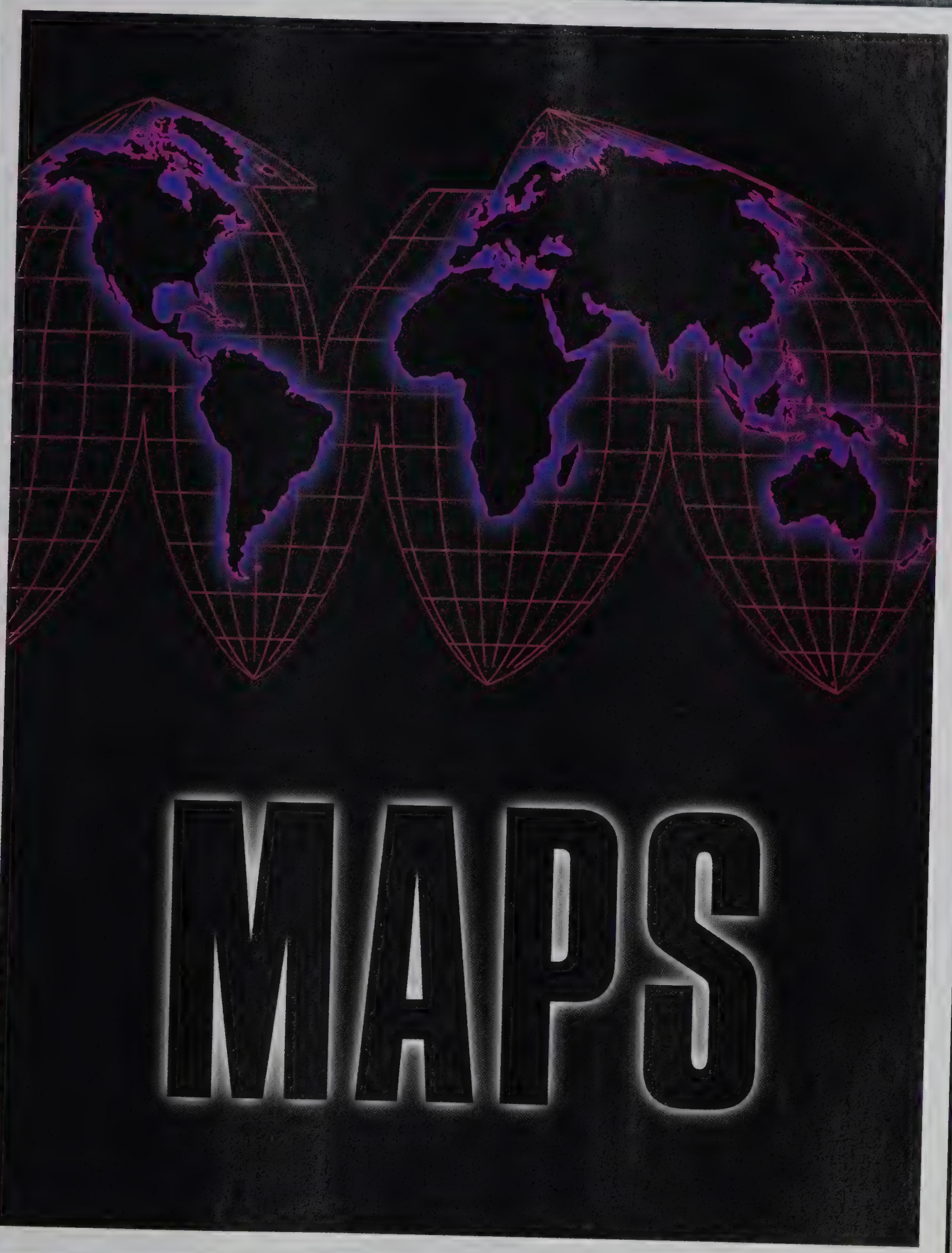
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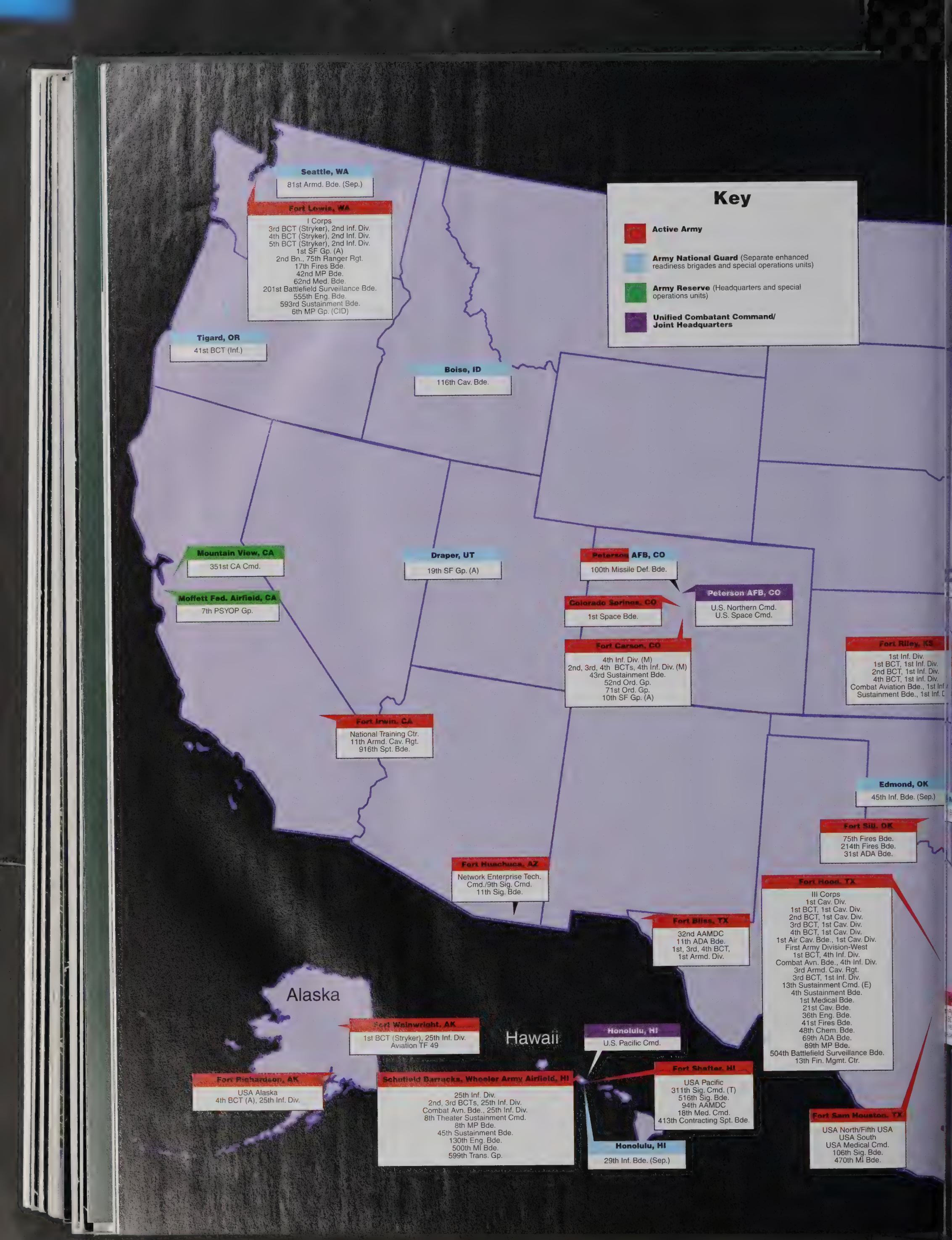
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MAPS


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Active Army
Army National Guard (Separate enhanced readiness brigades and special operations units)
Army Reserve (Headquarters and special operations units)
Unified Combatant Command/ Joint Headquarters
Seattle, WA
81st Armd. Bde. (Sep.)
Fort Lewis, WA
I Corps
3rd BCT (Stryker), 2nd Inf. Div.
4th BCT (Stryker), 2nd Inf. Div.
5th BCT (Stryker), 2nd Inf. Div.
1st SF Gp. (A)
2nd Bn., 75th Ranger Rgt.
17th Fires Bde.
42nd MP Bde.
62nd Med. Bde.
201st Battlefield Surveillance Bde.
555th Eng. Bde.
593rd Sustainment Bde.
6th MP Gp. (CID)
Tigard, OR
41st BCT (Inf.)
Boise, ID
116th Cav. Bde.
Mountain View, CA
351st CA Cmd.
Moffett Fed. Airfield, CA
7th PSYOP Gp.
Draper, UT
19th SF Gp. (A)
Peterson AFB, CO
100th Missile Def. Bde.
Colorado Springs, CO
1st Space Bde.
Peterson AFB, CO
U.S. Northern Cmd.
U.S. Space Cmd.
Fort Carson, CO
4th Inf. Div. (M)
2nd, 3rd, 4th BCTs, 4th Inf. Div. (M)
43rd Sustainment Bde.
52nd Ord. Gp.
71st Ord. Gp.
10th SF Gp. (A)
Fort Riley, KS
1st Inf. Div.
1st BCT, 1st Inf. Div.
2nd BCT, 1st Inf. Div.
4th BCT, 1st Inf. Div.
Combat Aviation Bde., 1st Inf
Sustainment Bde., 1st Inf. D
Fort Irwin, CA
National Training Ctr.
11th Armd. Cav. Rgt.
916th Spt. Bde.
Edmond, OK
45th Inf. Bde. (Sep.)
Fort Sill, OK
75th Fires Bde.
214th Fires Bde.
31st ADA Bde.
Fort Huachuca, AZ
Network Enterprise Tech. Cmd./9th Sig. Cmd.
11th Sig. Bde.
Fort Bliss, TX
32nd AAMDC
11th ADA Bde.
1st, 3rd, 4th BCT,
1st Armd. Div.
Fort Hood, TX
III Corps
1st Cav. Div.
1st BCT, 1st Cav. Div.
2nd BCT, 1st Cav. Div.
3rd BCT, 1st Cav. Div.
4th BCT, 1st Cav. Div.
1st Air Cav. Bde., 1st Cav. Div.
First Army Division-West
1st BCT, 4th Inf. Div.
Combat Avn. Bde., 4th Inf. Div.
3rd Armd. Cav. Rgt.
3rd BCT, 1st Inf. Div.
13th Sustainment Cmd. (E)
4th Sustainment Bde.
1st Medical Bde.
21st Cav. Bde.
36th Eng. Bde.
41st Fires Bde.
48th Chem. Bde.
69th ADA Bde.
89th MP Bde.
504th Battlefield Surveillance Bde.
13th Fin. Mgmt. Ctr.
Alaska
Fort Wainwright, AK
1st BCT (Stryker), 25th Inf. Div.
Aviation TF 49
Fort Richardson, AK
USA Alaska
4th BCT (A), 25th Inf. Div.
Hawaii
Honolulu, HI
U.S. Pacific Cmd.
Schofield Barracks, Wheeler Army Airfield, HI
25th Inf. Div.
2nd, 3rd BCTs, 25th Inf. Div.
Combat Avn. Bde., 25th Inf. Div.
8th Theater Sustainment Cmd.
8th MP Bde.
45th Sustainment Bde.
130th Eng. Bde.
500th MI Bde.
599th Trans. Gp.
Fort Shafter, HI
USA Pacific
311th Sig. Cmd. (T)
516th Sig. Bde.
94th AAMDC
18th Med. Cmd.
413th Contracting Spt. Bde.
Honolulu, HI
29th Inf. Bde. (Sep.)
Fort Sam Houston, TX
USA North/Fifth USA
USA South
USA Medical Cmd.
106th Sig. Bde.
470th MI Bde.

Army Power Projection Forces

Fort Drum, NY
10th Mtn. Div. (LI)
1st BCT, 10th Mtn. Div.
2nd BCT, 10th Mtn. Div.
3rd BCT, 10th Mtn. Div.
Combat Avn. Bde., 10th Mtn. Div.
10th Sustainment Bde.

Syracuse, NY
27th Inf. Bde. (Sep.)

Staten Island, NY
353rd CA Cmd.

Camp Douglas, WI
32nd Inf. Bde. (Sep.)

Fort Meade/Fort Detrick, MD
First Army Division-East
704th MI Bde.
902nd MI Gp.
21st Sig. Bde.

Aberdeen Proving Gd., MD
20th Spt. Cmd. (CBRNE)

Fort Meade, MD
352nd CA Cmd.

Rock Island Arsenal, IL
Army Sustainment Cmd.
Joint Munitions Cmd.

Cleveland, OH
2nd PSYOP Gp.

Offutt AFB, NE
S. Strategic Cmd.

Washington, DC/Arlington, VA
USA Corps of Eng.
Installation Mgmt. Cmd.
USA Mil. Dist. of Wash.
3rd U.S. Inf. Rgmt.

Ft. Belvoir, VA
USA Materiel Cmd.
USA Intelligence & Scty. Cmd.
USA Criminal Invst. Cmd.
USA Acquisition Spt. Ctr.
1st Info. Ops. Cmd.
701st MP Gp. (CID)

Scott AFB, IL
U.S. Trans. Cmd.
Mil. Surface Deployment & Dist. Cmd.

Indianapolis, IN
76th Inf. Bde. (Sep.)

Fort Leonard Wood, MO
4th Maneuver
Enhancement Bde.

Alexandria, VA
USA Test & Eval. Cmd.

Fort Eustis, VA
597th Trans. Gp.

Fort Lee, VA
49th QM Gp.

Knoxville, TN
278th Armd. Cav. Rgt.

Fort Monroe, VA
USA Training &
Doctrine Cmd.

Norfolk, VA
U.S. Joint Forces Cmd.

Fort Campbell, KY
101st Abn. Div. (AA)
1st, 2nd, 3rd, 4th BCTs,
101st Abn. Div.
101st Combat Avn. Bde.
159th Combat Avn. Bde.
101st Sustainment Bde.
160th Sp. Ops. Avn. Rgt. (A)
5th SF Gp. (A)

Atlanta/Forts McPherson & Gillem, GA
USA Forces Cmd.
USA Reserve Cmd.
USA Central/Third USA
First USA
3rd MP Gp. (CID)

Sunny Point, NC
596th Trans. Gp.

Clinton, NC
30th Inf. Bde. (Sep.)

Rock, AR
Bde. (Sep.)

Fort Bragg, NC
XVIII Abn. Corps
82nd Abn. Div.
1st, 2nd, 3rd, 4th BCTs, 82nd Abn. Div.
Combat Avn. Bde., 82nd Abn. Div.
82nd Sustainment Bde.
XVIII Abn. Corps Arty.
1st Sustainment Cmd.
16th MP Bde. (A)
18th Fires Bde. (A)
18th Avn. Bde. (A)
18th Fin. Mgmt. Ctr. (A)
20th Eng. Bde. (A)
35th Sig. Bde. (A)
44th Med. Bde.
108th ADA Bde.
525th Battlefield Surveillance Bde.
USA Sp. Ops. Cmd. (A)
USA SF Cmd. (A)
USA CA & PSYOP Cmd. (A)
95th CA Bde. (A)
3rd SF Gp. (A)
7th SF Gp. (A)
4th PSYOP Gp. (A)
1st Spec. Warfare Tng. Gp.
Spec. Warfare Med. Gp. (A)
528th Sustainment Bde. (A)
112th Sig. Bn. (Special Ops.) (A)

Tupelo, MS
155th Armd. Bde. (Sep.)

Redstone Arsenal, AL
USA Space & Missile Def. Cmd./
Army Fcs. Strat. Cmd.

Macon, GA
48th Inf. Bde. (Sep.)

Birmingham, AL
20th SF Gp. (A)

Fort Gordon, GA
7th Signal Cmd.
35th Sig. Bde.
93rd Sig. Bde.
513th MI Bde.
706th MI Gp.

Hunter Army Airfield, GA
1st Bn., 75th Ranger Rgt.
Combat Avn. Bde.,
3rd Inf. Div. (M)

Fort Rucker, AL
Air Traffic Svcs. Cmd.
164th Theater Airfield Ops. Gp.

Fort Benning, GA
75th Ranger Rgt.
3rd BCT, 3rd Inf. Div.
3rd Bn., 75th Ranger Rgt.

Fort Stewart, GA
3rd Inf. Div. (M)
1st BCT, 3rd Inf. Div.
2nd BCT, 3rd Inf. Div.
4th BCT, 3rd Inf. Div.
3rd Sustainment Bde.

Fort Polk, LA
Readiness Tng. Ctr.
BCT., 10th Mtn. Div.
162nd Inf. Bde.
uver Enhancement Bde.

Pineville, LA
256th Inf. Bde. (Sep.)

Pensacola, FL
350th CA Cmd.

MacDill AFB, FL
U.S. Central Cmd.
U.S. Sp. Ops. Cmd.

Miami, FL
U.S. Southern Cmd.

Tampa, FL
53rd Inf. Bde. (L) (Sep.)

Puerto Rico


Fort Lewis, WA
66th Avn. Bde.
Bismarck, ND
141st Maneuver Enhancement Bde.
Rapid City, SD
109th Regional Spt. Gp.
Sioux Falls, SD
196th Maneuver Enhancement Bde.
Cheyenne, WY
115th Fires Bde.
Camp Williams, UT
I Corps Arty.
Lincoln, NE
67th Spt. Gp.
West Jordan, UT
211th Avn. Gp. (Atk.)
Draper, UT
300th MI Bde.
115th Eng. Gp.
Aurora, CO
169th Fires Bde.
Fort Leavenwo
35th Inf. Div
Fresno, CA
Combat Avn. Bde., 40th Inf. Div.
Los Alamitos, CA
40th Inf. Div.
Enid, OK
45th Fires Bde.
San Diego, CA
2nd. Bde., 40th Inf. Div.
Phoenix, AZ
38th Avn. Gp. (Atk.)
Rio Rancho, NM
111th Combat Spt. Bde.
Tucson, AZ
852nd Rear Area Ops. Ctr.
Fort Worth, T
56th BCT, 36th Inf.
Dallas, TX
72nd BCT, 36th Inf
Alaska
Fort Richardson, AK
38th Troop Cmd.
297th Battlefield Surveillance Bde.
Hawaii
Austin, TX
36th Inf. Div.
Combat Avn. Bde
36th Inf. Div.
136th Maneuver Enhancement Bde
176th Eng. Bde.

Army National Guard

Minnesota
Fremount: 34th Inf. Div.
Exter: 1st BCT, 34th Inf. Div.
Paul: Combat Avn. Bde., 34th Inf. Div.

Boone, IA
2nd BCT, 34th Inf. Div.

Chicago, IL
33rd BCT STB

Jackson, MI
272nd Regional Spt. Gp.

Lansing, MI
46th MP Cmd.

Taylor, MI
177th MP Bde.

Troy, NY
42nd Inf. Div.

Manchester, NH
197th Fires Bde.

Augusta, ME
120th Regional Spt. Gp.

Springfield, MA
26th BCT, 29th Inf. Div.

Rhode Island
Providence: 103rd FA Bde.
Warwick: 43rd MP Bde.

Pennsylvania
Harrisburg: 28th Inf. Div.
Washington: 2nd Bde., 28th Inf. Div.
Scranton: 55th Bde., 28th Inf. Div.
Philadelphia: 56th Bde. (Stryker), 28th Inf. Div.
Annville: Avn. Bde., 28th Inf. Div.

Akron-Canton, OH
37th BCT, 38th Inf. Div.

Decatur, IL
33rd Inf. Bde.

Indianapolis, IN
38th Inf. Div.

Maryland
Pikesville Military Reservation: 58th BCT, 29th Inf. Div.
Aberdeen Proving Gd.: Combat Avn. Bde., 29th Inf. Div.

Dover, DE
261st Sig. Bde.

Warrensburg, MO
Combat Avn. Bde., 35th Inf. Div.

Shelbyville, IN
Combat Avn. Bde., 38th Inf. Div.

Columbus, OH
16th Eng. Bde.

Fort Belvoir, VA
29th Inf. Div. (L)

Washington, DC
260th MP Cmd.

Fort Leonard Wood, MO
Eng. Bde., 35th Inf. Div.

Frankfort, KY
63rd Avn. Gp.

Staunton, VA
116th BCT, 29th Inf. Div.

Virginia Beach, VA
54th Fires Bde.

Cape Girardeau, MO
35th Eng. Bde.

Louisville, KY
149th Maneuver Enhancement Bde.

Lexington, KY
138th Fires Bde.

Durham, NC
30th Corps Spt. Gp.

Fayetteville, AR
142nd Fires Bde.

Chattanooga, TN
230th Sustainment Bde.

Spartanburg, SC
228th Sig. Bde.

Kinston, NC
449th Avn. Gp. (Lift)

Jackson, TN
194th Eng. Bde.

Little Rock, AR
87th Avn. Bde.

Birmingham, AL
167th Theater Spt. Cmd.

Anderson, SC
263rd AAMDC

Charleston, SC
218th Maneuver Enhancement Bde.

Jackson, MS
185th Avn. Gp. (Lift)

Selma, AL
122nd Corps Spt. Cmd.

Northport, AL
31st Chemical Bde.

Laurel, MS
184th Trans. Cmd. Element

Orlando, FL
164th ADA Bde.

Homestead, FL
50th Area Spt. Gp.

Puerto Rico

Juana Diaz, Puerto Rico
92nd Maneuver Enhancement Bde.


Vancouver, WA
104th Div.
2nd Bde., 104th Div.
San Pablo, CA
2nd Med. Bde.
Camp Parks, CA
5th Bde., 75th Div.
Dublin, CA
2nd Bde., 100th Div.
Moffett Field, CA
63rd Regional Spt. Cmd.
Fort Hunter-Liggett, CA
91st Tng. Bde.
Los Angeles, CA
311th Sustainment Cmd.
Los Alamitos, CA
63rd Regional
Readiness Cmd.
Wichita, KS
331st Med. Gp.
Oklahoma City, O
95th Div.
80th Log. Spt. Bde.
Lawton, OK
1st Bde., 95th Div.
Seagoville,
807th Med. Cm
San Antonio/
Fort Sam Houston, TX
USAR Med. Readiness
and Tng. Cmd.
4th Sustainment Cmd.
4th Bde., 100th Div.
Alaska
Hawaii
Fort Shafter, HI
9th Mission Spt. Cmd.
311th Sig. Cmd. (T)

U.S. Army Reserve

Fort McCoy, WI
USAR Tng. Cmd.
88th Regional Spt. Cmd.
84th Tng. Cmd.
86th Tng. Bde.

ort Snelling, MN
nd Bde., 102nd Div.

Buffalo, NY
4th Bde., 98th Div.

Fort Devens, MA
804th Med. Cmd.

Rochester, NY
98th Div.

New Windsor, NY
411th Eng. Bde.

Providence, RI
1st Bde., 100th Div.

Inkster, MI
300th MP Bde.

Ashley, PA
11th MP Bde.

Fort Dix, NJ
99th Regional Spt. Cmd.
2nd Bde., 75th Div.

Uniondale, NY
800th MP Bde.

Des Moines, IA
103rd Sustainment
Cmd. (E)

Fort Sheridan, IL
330th Med. Bde.
244th Avn. Bde.

Farrell, PA
3rd Bde., 102nd Div.

Harrisburg, PA
2nd Bde., 94th Div.

Edison, NJ
78th Tng. Bde.

Bronx/Staten Island, NY
8th Med. Bde.
3rd Bde., 100th Div.

Darien, IL
416th Theater Eng. Cmd.

Arlington Heights, IL
Regional Supt. Gp. West
84th USAR Spt. Cmd. (West)

Coraopolis, PA
316th Sustainment Cmd.

Fort Belvoir, VA
MI Readiness Cmd.

Fort Meade, MD
200th MP Cmd.
Army Reserve Tng. Spt. Div. East

Indianapolis, IN
310th Sustainment Cmd.
3rd Bde., 94th Div.

Charleston, WV
1st Bde., 94th Div.

Fort Leonard Wood, MO
102nd Div.

Fort Knox, KY
70th Div.
11th Theater Avn. Cmd.

Louisville, KY
100th Div.

Fort Lee, VA
94th Div.

Salem, VA
3rd Bde., 98th Div.

Richmond, VA
80th Tng. Cmd.

Lexington, KY
3rd Bde., 95th Div.

sa, OK
., 102nd Div.

Nashville, TN
332nd Med. Bde.

Charlotte, NC
108th Tng. Cmd.

Decatur, GA
3rd Med. Cmd.
4th Bde., 94th Div.

Fort Jackson, SC
81st Regional Spt. Cmd.
2nd Bde., 98th Div.

Birmingham, AL
Deployment Spt. Cmd.
USAR Sustainment Cmd.
87th USAR Spt. Cmd. (East)
4th Bde., 75th Div.

East Point, GA
335th Sig. Cmd. (T)

Greenville, SC
415th Chemical Bde.

Vicksburg, MS
412th Theater Eng. Cmd.

Montgomery, AL
926th Eng. Bde.

Columbus, GA
1st Bde., 98th Div.

Fort Gordon, GA
359th Sig. Bde. (T)

yan, TX
h Eng. Bde.

Fort Gillem, GA
Army Reserve Spt. Cmd.

ton, TX
Cmd. Tng. Div.
, 75th Div.

Orlando, FL
143rd Sustainment Cmd.

New Orleans, LA
377th Theater
Sustainment Cmd.

Pinellas Park, FL
USA Reserve Medical Cmd.

Fort Buchanan, PR
1st Mission Spt. Cmd.
5th Bde., 94th Div.

Puerto Rico

Army Forward Deployed Forces

Alaska

Alaska Cmd./
JTF Alaska

Guantanamo Bay, Cuba

Joint Task Force-
Guantanamo

South America/ Caribbean

Counter-Drug Operations
Support Elements

Germany

U.S. European Cmd.

Germany

7th Civil Spt. Cmd.

The Netherlands

598th Trans. Gp.

Belgium

Supreme HQ
Allied Powers Europe

Africa

U.S. Africa Cmd.
(Headquartered in Germany)

Key

- Active Army
- Army National Guard
- Army Reserve
- Unified Combatant Commands and Joint/Combined Headquarters

Germany

U.S. Army Europe &
Seventh U.S. Army
V Corps
1st Armd. Div.
2nd BCT, 1st Armd. Div.
2nd Cav. Rgt. (Stryker)
172nd Infantry Bde.
12th Combat Avn. Bde.

21st Theater
Sustainment Cmd.
16th Sustainment Bde.
405th Army Field Spt. Bde.
5th Sig. Cmd.
2nd Sig. Bde.
7th Sig. Bde.
357th Air & Missile Def. Det.

18th MP Bde.
18th Eng. Bde.
66th MI Bde.
30th Med. Cmd.
Seventh Army Joint
Multinational Tng. Cmd.
USA Joint Multinational
Readiness Ctr.

266th Finance Ctr.
USA Europe Rgnl.
Med. Cmd.
USA Contrc. Cmd.- Eur.
202nd MP Gp. (CID)
Landstuhl Rgnl. Med. Ctr.
USA Contracting Cmd.-
Europe

Italy

USA Southern European
Task Force-U.S. Army Africa
173rd Abn. Bde.
Cmbt. Team

The Sinai Peninsula

Multi-National Force
and Observers

Qatar

Area Spt. Gp. - Qatar

Horn of Africa

Joint Task Force-
Horn of Africa

Iraq

Multi-National Force-Iraq
Multi-National Security
Transition Cmd.-Iraq
Iraq Assistance Group
Iraq Reconstruction
Management Office

Iraq

Multi-National Corps-Iraq
Operation Iraqi Freedom
Forces

Kuwait

Area Spt. Gp. - Kuwait
595th Trans. Gp. Fwd.
160th Sig. Bde.
Operation Iraqi Freedom
Support Elements

Task Force Falcon

Afghanistan

Combined Forces
Cmd.-Afghanistan
U.S. Combined Scty.
Transition Cmd.-
Afghanistan

Afghanistan

Operation Enduring
Freedom Forces

South Korea

U.N. Command
Combined Forces Cmd.
U.S. Forces Korea

South Korea

Eighth U.S. Army
2nd Inf. Div.
1st Heavy BCT,
2nd Inf. Div.
2nd Combat Avn. Bde.,
2nd Inf. Div.
210th Fires Bde.,
2nd Inf. Div.
65th Med. Bde.
19th Sustainment Cmd. (E)
35th ADA Bde.
501st Sustainment Bde.
501st MI Bde.
1st Sig. Bde.
411th Contracting
Spt. Bde.
175th Fin. Mgmt. Ctr.
Materiel Spt. Ctr.-Korea

Japan

U.S. Army Japan/
I Corps Forward

Okinawa, Japan

10th Area Spt. Gp.

The Philippines

Operation Enduring
Freedom Support
Elements

The Association of the United States Army's

Institute of Land Warfare

Presentations at the 2009 AUSA Annual Meeting and Exposition

AUSA Book Program
Monday, 5 October, 1:00 p.m.

Medics at War: Military Medicine from Colonial Times to the 21st Century
by John T. Greenwood, PhD and Lt. Col. Clifton Berry Jr. (USA, Ret.)

Chief of Staff: The Principal Officers Behind History's Greatest Commanders
Vol.1: Napoleonic War to World War I and *Vol. 2: World War II to Korea and Vietnam*
by MG David T. Zabecki (AUS, Ret.)

Why War? Why an Army?
by COL John M. Hoyle, PhD (USA, Ret.)

General William E. Depuy: Preparing for Modern War
by COL Henry G. Dole (USA, Ret.)

Airborne Forces at War. From Parachute Test Platoon to the 21st Century
by Robert K. Wright, PhD and John T. Greenwood, PhD

Normandy to Victory: The War Diary of General Courtney H. Hodges and the First U.S. Army
by John T. Greenwood, PhD - editor

The Lost Battalion: The 2/12th Cavalry at Hue
by LTC Charles A. Krohn (USA, Ret.)

Homeward Bound: American Veterans Return from War
by COL Richard H. Taylor (USA, Ret.) and Sandra Wright Taylor

Iraq and Back: Inside the War to Win the Peace
by COL Kimberly Olson (USAF, Ret.)

Land Warfare Papers
Wednesday, 7 October, 9:00 a.m.

Proactive Self-Defense in Cyberspace
by Colonel Bruce D. Caulkins – (Land Warfare Paper 72, August 2009)

The Evolution of Noncommissioned Officers in Training Soldiers
by Dr. Robert S. Rush, LTC (Ret.) – (Land Warfare Paper 75, September 2009)

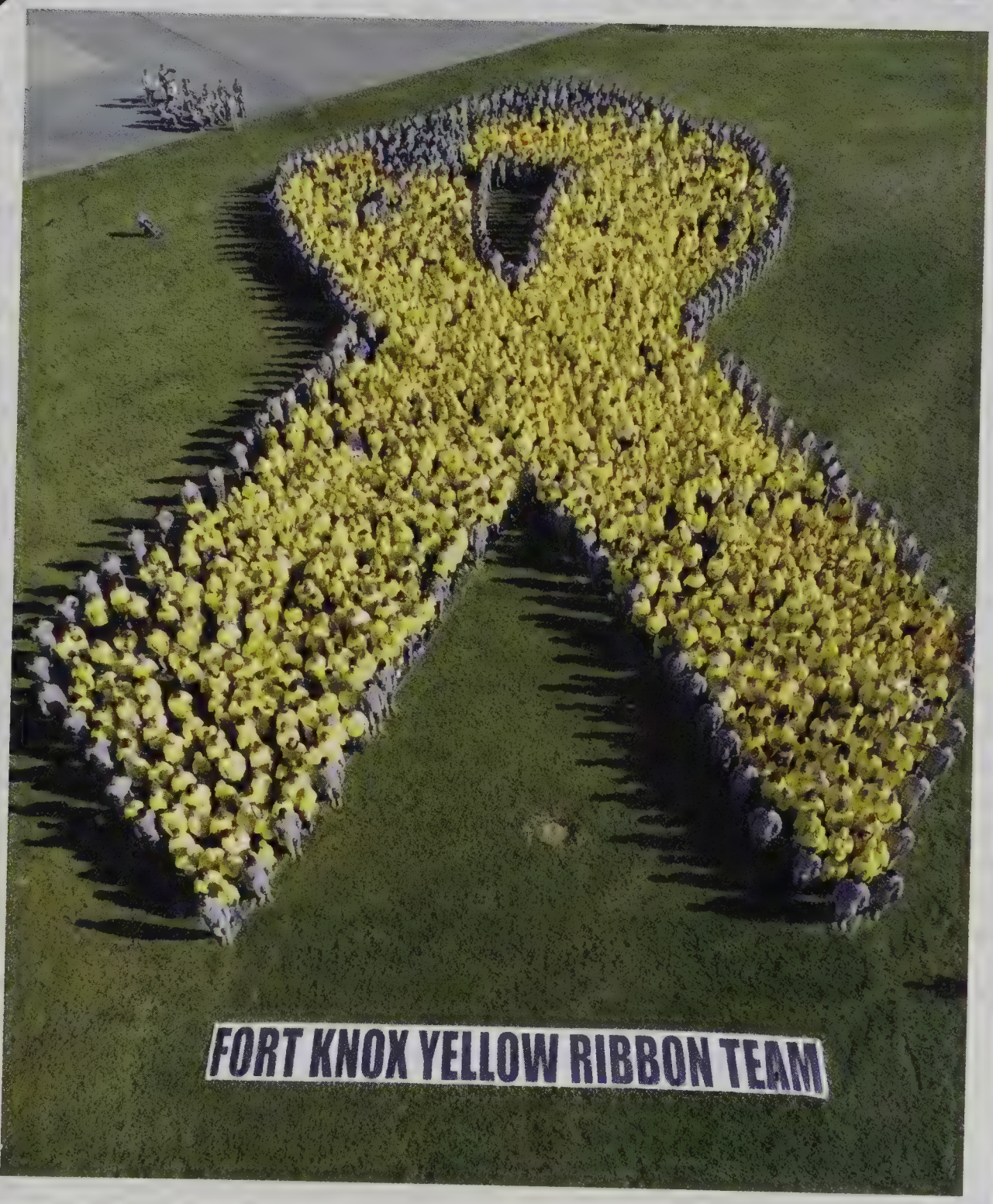
Collateral Damage: How Can the Army Best Serve a Soldier with Post-Traumatic Stress Disorder?
by Colonel Richard D. O'Connor – (Land Warfare Paper 71, February 2009)

Arm yourself with knowledge!

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INSTALLATIONS

U.S. ARMY POSTS



FORT KNOX YELLOW RIBBON TEAM

This section includes posts and installations primarily supporting the active Army in the continental United States, Hawaii, Alaska and Puerto Rico. Army ammunition plants and Army installations in caretaker or inactive status have been excluded.

Acreages reflect real estate under Department of the Army control in 2009.

The DSN and commercial telephone numbers listed are for operator assistance.

Data are current as of August 7 and are based on information supplied by each post or installation.

Aberdeen Proving Ground, MD 21005 and 21010. Opened 1917; home of 70 organizations, including Army Research, Development and Engineering Cmd.; Army Ordnance Museum and Ordnance Center and Schools; 20th Support Command (CBRNE); Army Developmental Test Command; Army Research Laboratory (Aberdeen site); Medical Institute of Chemical Defense; Aberdeen Test Center; Army Materiel Systems Analysis Activity; Northeast Civilian Personnel Operations Center; Army Evaluation Center; Center for Health Promotion and Preventive Medicine; Army Materiel Command Band; 4,312 mil., 8,598 civ., 3,899 contractors; 72,229 acres, 35 miles northeast of Baltimore. DSN: 298-5201; (410) 278-5201.

Anniston Army Depot, AL 36201-4199. Opened 1941; repairs and retrofits combat tracked vehicles, artillery and small arms; receives and stores general supplies, ammunition, missiles, small arms and strategic materiel; 59 mil., 6,825 civ. (including tenants and contractors); 15,000 acres adjacent to Pelham Range, 10 miles west of Anniston. DSN: 571-1110; (256) 235-7501.

Fort A.P. Hill, VA 22427. Opened 1941; named for LTG Ambrose Powell Hill, CSA; winner 2008 Army Communities of Excellence Award; 76,000-acre regional training center used for active and reserve component training of all service branches and federal agencies; 27,000-acre live-fire range complex; 1,661 mil. and civ., 227 reserve components. DSN: 578-8760; (804) 633-8760.

Fort Belvoir, VA 22060. An Army property since 1912; named for the manor house of Col. William Fairfax, 1736–1741, the ruins of which remain on the installation; provides logistical, intelligence and administrative support to more than 120 tenant and satellite organizations; major tenants are Defense Logistics Agency; Defense Contract Audit Agency; Defense Threat Reduction Agency; Defense Acquisition University; U.S. Army Intelligence and Security Cmd.; DeWitt Army Community Hospital; Night-Vision and Electronics Sensors Directorate; CECOM IEWSD Projects Division; CECOM Software Center-Belvoir; National Geospatial Intelligence School; Army Management Staff College; 29th Inf. Div. (Lt.) (ARNG); approx. 6,400 mil., 17,200 civ. (including tenants and DoD contractors); 8,656 acres, 11 miles southwest of Alexandria and 17 miles southwest of Washington, D.C. DSN: 685-2052; (703) 805-2052.

Fort Benning, GA 31905. Established 1918; named after BG Henry L. Benning, CSA; home of Army Infantry Center and School; Army Marksmanship Unit; 3rd Bde., 3rd Inf. Div. (Mech.); Western Hemisphere Institute for Security Cooperation; 75th Ranger Rgt.; 199th Infantry Bde.; 197th Infantry Bde.; 192nd Infantry Bde.; 198th Infantry Bde.; Martin Army Community Hospital; Medical Department Activity, Ranger Training Bde.; 30,638 mil., 9,026 civ.; 181,386 acres, 9 miles south of Columbus. DSN: 835-2011; (706) 545-2011.

Fort Bliss, TX 79916. Established as the post opposite El Paso in 1848; named after LTC William Wallace Smith Bliss; home of the 32nd Army Air and Missile Defense Command; 11th Air Defense Artillery Brigade; the 4th, 1st and 3rd Brigade Combat Teams, 1st Armored Division; 5th Bde. Army Evaluation Task Force, 1st Armored Division; U.S. Sergeants Major Academy; Joint Task Force North; German Air Force Air Defense Center; 20,000 mil., 7,000 civ.; 1.2 million acres. DSN 978-0831; (915) 568-2121.

Blue Grass Army Depot, KY 40475-5001. Established 1941; performs total life-cycle management for DoD conventional standard and nonstandard ammunition; the Army's primary provider for go-to-war chemical defense equipment; fabricates and manufactures specified components and parts; supports the security and storage of on-site chemical weapons stockpile; approximately 1,200 personnel; 14,500 acres, 6 miles south of Richmond. DSN: 745-6380; (859) 779-6380.

Fort Bragg, NC 28310. Established as a field artillery site in 1918; named after MAJ Braxton Bragg, USA (he later served as a general in the CSA); as "Home of the Airborne," houses the XVIII Abn. Corps; 82nd Abn. Div.; 1st Theater Sustainment Cmd.; 108th ADA Bde.; 44th Medical Cmd.; 16th Military Police Bde.; 507th Corps Support Grp.; and 525th Battlefield Surveillance Bde.; U.S. Army Spc. Ops. Cmd.; SF Cmd.; JFK Special Warfare Center and School; Civil Affairs and Psychological Ops. Cmd.; 55,066 mil., 10,618 civ.; 160,832 acres, 10 miles northwest of Fayetteville, 50 miles south of Raleigh. DSN: 236-0011; (910) 396-0011.

Fort Campbell, KY 42223. Opened 1942; named for BG William B. Campbell, a Tennessee hero of the Mexican War and governor of Tennessee; home of 101st Abn. Div. (Air Assault); 5th Spc. Forces Grp. (Abn.); 160th Spc. Ops. Aviation Rgt. (Abn.); 30,865 mil., 4,569 civ.; 105,068 acres, 15 miles south of Hopkinsville, Ky., 10 miles northwest of downtown Clarksville, Tenn., and 50 miles northwest of Nashville. DSN: 635-1110; (270) 798-2151.

Carlisle Barracks, PA 17013. Established 1757; site of U.S. Army War College; Center for Strategic Leadership; Strategic Studies Institute; Army Physical Fitness Research Institute; Army Heritage and Education Center and Military History Institute archives; Peacekeeping and Stability Operations Institute; 540 mil., 760 civ.; 459 acres, 18 miles southwest of Harrisburg. DSN: 242-3131; (717) 245-3131.

Fort Carson, CO 80913. Established 1942; named for BG Christopher (Kit) Carson; home of 4th Inf. Div.; 10th Spc. Forces Grp. (Abn.); 4th Engineer Battalion; 43rd Support Bde.; 10th Combat Spt. Hospital; 759th Military Police Battalion; 24,600 mil., 5,700 civ.; 137,403 acres adjacent to Colorado Springs and 235,330 acres at Piñon Canyon Maneuver Site near La Junta, Colo. DSN: 691-5811; (719) 526-5811.

Cold Regions Research and Engineering Laboratory, NH 03755. Opened 1961; field operating agency of the Army Corps of Engineers Engineer Research and Development Center (ERDC); conducts cold-weather civil works and military research and testing; 2 mil., 200 civ.; 31 acres at Hanover, N.H.; 1 mil., 5 civ. at Fairbanks, Alaska, and 3 civ. at Anchorage, Alaska, field offices. (603) 646-4100.

Construction Engineering Research Laboratory, IL 61826-9005. Established 1968; one of seven labs in the U.S. Army Engineer Research and Development Center; conducts research and development for Army Corps of Engineers' programs in facilities construction, operations, maintenance and environmental quality, including pollution prevention, compliance and natural resource management; 330 civ.; 33 acres at Champaign. (217) 352-6511.

Corpus Christi Army Depot, TX 78419-5260. Opened 1961; DoD Center for Industrial Technical Excellence for rotary-wing aircraft; performs overhaul, repair, modification, recapitalization, retrofit, testing and modernization of Army and DoD rotary-wing aircraft for all services and foreign military sales; serves as depot training base for active Army, National Guard, Reserve and foreign military personnel; provides worldwide on-site maintenance service; aircraft crash analysis; oil, chemical and metallurgical analysis; and training support; 3,761 civ.; 158 acres (leased from Naval Air Station-Corpus Christi), 12 miles southeast of Corpus Christi. DSN: 861-3627; (361) 961-3627.

Deseret Chemical Depot, UT 84074-5000. Established 1942; Army-operated; responsible for the safe, secure and environmentally correct storage and destruction of chemical agents. Authorized strength: 2 mil., 400 govt. civilians, 1,000 contractors; 19,000 acres at Rush Valley, 40 miles southwest of Salt Lake City. (435) 833-4295.



rt Detrick, MD 21702. Established 1943; med for MAJ Frederick Louis Detrick, aryland Army National Guard flight surn; community includes more than 40 ten- organizations representing five Cabinetel agencies and all armed services. The ssion encompasses three major areas: dical research, strategic communication d defense medical logistics. 1,900 mil., 00 civ.; 1,341 acres at main post in Freder- and Forest Glen Annex in Silver Spring, . DSN: 343-8000; (301) 619-8000.

t Drum, NY 13602. Established 1908; ned for LTG Hugh A. Drum, commander, t Army, 1938–43; 10th Mtn. Div. (Lt. Inf.);



18,681 mil., 4,396 civ.; 107,265 acres, 8 miles north of Watertown and 78 miles north of Syracuse. DSN: 772-6011; (315) 772-6011.

Dugway Proving Ground, UT 84022. Established 1942; performs test and evaluation of defensive chemical and biological materiel, environmental technology testing, meteorological and atmospheric transport modeling; 5 mil., 1,450 civ.; 798,218 acres, 85 miles southwest of Salt Lake City. DSN: 789-2116; (435) 831-2116.

Fort Eustis, VA 23604. Established 1918; named for Bvt. BG Abraham Eustis, Virginia native and veteran of the War of 1812; home of Military Surface Deployment and Distribution Command Operations Center; Army Transportation Center and School; Army Training Support Center; Aviation Applied Technology Directorate; Army Aviation Logistics School; 8th Transportation Bde.; 7th Sustainment Bde.; 4,777 mil., 4,905 civ.; 8,248 acres adjacent to Newport News and 11 miles southeast of Williamsburg. DSN: 826-5215; (757) 878-5215.

Fort Gillem, GA 30297. Opened 1941; named for LTG Alvan C. Gillem Jr., Third Army commander, 1947–50; subinstallation of Fort McPherson, Ga.; site of First Army; 3rd Medical Cmd.; Army Criminal Investigation Laboratory; 3rd MP Group, Army Criminal Investigation Cmd.; 2nd Recruiting Bde.; Military Entrance Processing Station; 467 active Army mil., 1,752 reservists, 1,443 civ.; 1,427 acres at Forest Park, 18 miles southeast of Atlanta. DSN: 797-5000; (404) 469-5000.

Fort Gordon, GA 30905. Opened 1941; named for LTG John Brown Gordon, CSA; home of the Army Signal Center and School; Dwight David Eisenhower Army Medical Center; 15,976 mil., 7,828 civ.; 56,506 acres, 12 miles southwest of Augusta. DSN: 780-0110; (706) 791-0110.

Fort Hamilton, NY 11252. Established 1825 as part of the New York harbor battery defense system; named for Alexander Hamilton; home to the New York City Recruiting Bn.; Corps of Engineers, North Atlantic Div. headquarters; New York Military Entrance Processing Station; 1179th Deployment Support Bde.; New York National Guard Task Force Empire Shield; provides administrative and logistical support for the Army and other DoD agencies in the metropolitan area. DSN: 232-4101; (718) 630-4101.

Fort Hood, TX 76544. Opened 1942; named for GEN John Bell Hood, CSA; site of III Corps; 1st Cav. Div.; 4th Inf. Div. (Mech.); 13th Sustainment Cmd. (Expeditionary); 3rd Arm. Cav. Reg.; 89th MP Bde.; 504th Battlefield Surveillance Bde.; 36th Eng. Bde.; 21st Cav. Bde. (Air Combat); 41st Fires Bde.; 4th Bn., 5th ADA Bde.; 13th Finance Grp.; 53,000 mil., 4,900 civ.; 209,486 acres adjacent to Killeen, 60 miles north of Austin and 150 miles south of Dallas. DSN: 737-1110; (254) 287-1110.

Fort Huachuca, AZ 85613. Opened 1877; home of Army Intelligence Center and School; Network Enterprise Technology Cmd./9th Army Sig. Cmd.; Army Electronic Proving Ground; Information Systems Engineering Cmd.; 11th Sig. Bde.; Joint Interoperability Test Cmd.; 7,240 mil., 2,842 civ.; 73,242 acres, 75 miles southeast of Tucson. DSN: 821-7111; (520) 538-7111.

Hunter Army Airfield, GA 31409. Established 1940; named for Army Air Corps MG Frank O'Driscoll Hunter, a native of Savannah; supports 3rd Inf. Div., Combat Avn. Bde. and 1st Bn., 75th Ranger Rgt.; 3rd Bn., 160th Spc. Ops. Aviation Rgt.; 224th MI Bn.; USMC Reserve Center; 260th Quartermaster Bn.; 6th ROTC Bde.; USCG Air Station Savannah; 7,000 mil., 600 civ.; 5,370 acres at Savannah. DSN: 729-5617; (912) 315-5617.

Fort Irwin, CA 92310. Established 1940; named for MG George LeRoy Irwin, noted World War I artillery commander; site of National Training Center; home of 11th Cav. Rgt.; National Training Center Support Bde.; Operations Group; U.S. Army Garrison; 6,590 mil., 3,640 civ.; 768,000 acres, 37 miles northeast of Barstow. DSN: 470-4111; (760) 380-4111.

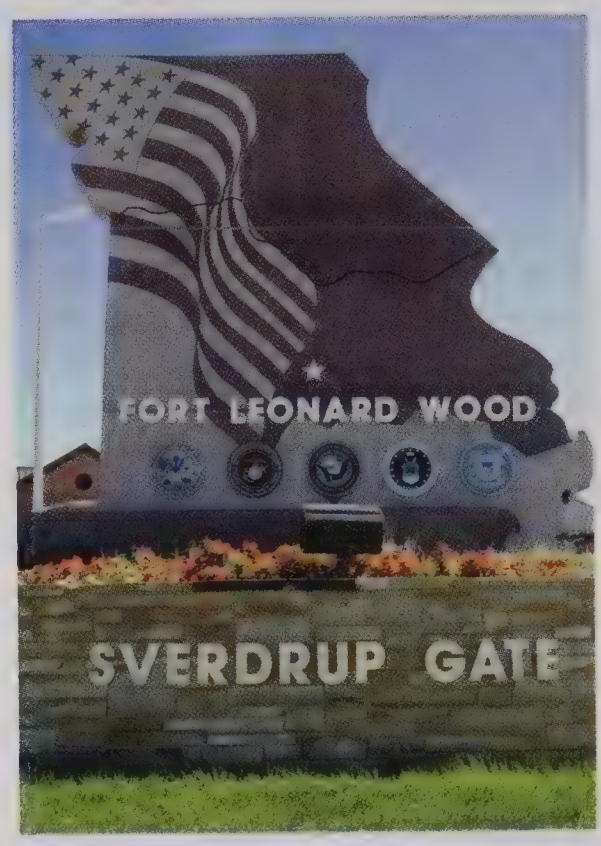
Fort Jackson, SC 29207. Established 1917; named for President Andrew Jackson; Basic Combat Training Ctr. of Excellence: conducts basic combat training and combat support advanced individual training; site of 157th, 165th, 171st and 193rd Infantry Bdes.; 81st Regional Readiness Cmd.; Soldier Support Institute; Army Chaplain Center and School; Defense Academy for Credibility Assessment; Army Drill Sergeant School; Moncrief Army Community Hospital; 3,900 mil., 5,200 civ.; 52,301 acres adjacent to Columbia. DSN: 734-1110; (803) 751-1110.

Fort Knox, KY 40121. Opened 1918; named for MG Henry Knox, Revolutionary War hero and first Secretary of War; home of the U.S. Army Armor Center and School, including 194th Armored Bde., 16th Cavalry Rgt. and U.S. Army NCO Academy; Army Recruiting Cmd. and the Third U.S. Army Recruiting Bde.; 4th Bde., 85th Div. (Training Support); ROTC Eastern Region Cadet Cmd.; the Patton Museum of Cavalry and Armor; III Corps Support Cmd.; 17,889 mil., 5,774 civ.; 109,054 acres, 35 miles southwest of Louisville. DSN: 464-1181; (502) 624-1181.

Fort Leavenworth, KS 66027. Established 1827; named for COL Henry Leavenworth, commander of the 3rd Inf. Rgt. when the post was founded; home of the Combined Arms Center; Command and General Staff College; Army Training and Doctrine Cmd. Analysis Center; 35th Inf. Div. (ARNG); U.S. Disciplinary Barracks; 3,597 mil., 3,624 civ.; 5,600 acres adjacent to Leavenworth, 32 miles northwest of Kansas City. DSN: 552-4021; (913) 684-4021.

Fort Lee, VA 23801. Opened in 1917 as Camp Lee; named for GEN Robert E. Lee, CSA; home to the Sustainment Center of Excellence and U.S. Army Logistics, which includes the Combined Arms Support Command, Army Quartermaster Center & School, Army Logistics University, Defense Commissary Agency and 25 tenant/agency partners; 6,878 mil., 2,625 civ., 1,478 contractors; 5,907 acres, located approximately 3 miles east of Petersburg. DSN: 539-3000; (804) 765-3000.

Fort Leonard Wood, MO 65473. Opened 1941; named for MG Leonard Wood, Army Chief of Staff, 1910–14; home of the U.S. Army Maneuver Support Center; responsible for training chemical, engineer and military police specialists in the Army, Air Force, Navy, Marine Corps and Coast Guard; responsible for Basic Combat Training and motor transport training; 15,426 mil., 13,565 civ.; 63,410 acres, 88 miles northeast of Springfield, 135 miles southwest of St. Louis. (573) 596-0131.



Letterkenny Army Depot, PA 17201-4150. Opened 1942; named after Letterkenny Township, which the depot absorbed; home of the Army's Center of Industrial and Technical Excellence for Air Defense and Tactical Missile Systems and Mobile Electronic Power Generation Equipment; Humvee Recapitalization; Force Provider reset operations; conducts storage, issue, rebuilding, testing, overhauling and demilitarization of equipment, tactical missiles and ammunition; 3 mil., more than 2,500 civ. and 861 contract employees; 18,861 acres, 5 miles north of Chambersburg and 50 miles southwest of Harrisburg. DSN: 570-8111; (717) 267-8111.

Fort Lewis, WA 98433. Established 1917; named for CPT Meriwether Lewis of the Lewis and Clark Expedition; home of I Corps; 3rd Bde., 2nd Inf. Div.; 4th Bde., 2nd Inf. Div.; 5th Bde., 2nd Inf. Div.; 17th Fires Bde.; 555th Engineer Bde.; 593rd Sustainment Bde.; 201st Battlefield Surveillance Bde.; 191st Infantry Bde.; 42nd MP Bde. and Directorate of Emergency Services; 1st Special Forces Group (Abn.); 2nd Bn., 75th Ranger Regt.; U.S. Army Cadet Command's 8th Brigade; Western Regional Medical Command; Madigan Army Medical Center; Yakima Training Center; 30,800 mil., 11,372 civ.; 86,041 acres, 10 miles southeast of Tacoma. DSN: 351-1110; 253-967-1110. (Fort Lewis and McChord Air Force Base are scheduled to consolidate as a Joint base in January 2010. The Army will operate the Joint base supporting all units on the former Fort Lewis and McChord AFB.)

Fort McPherson, GA 30330. Established 1885; named for MG James Birdseye McPherson, Civil War commander of the Army of the Tennessee, killed during the Battle of Atlanta, 1864; site of Army Forces Cmd.; U.S. Army Central; Army Reserve Cmd. and Installation Management Command Southeast; 1,757 mil., 1,124 reservists, 2,204 civ.; 487 acres, on the south side of Atlanta. DSN: 367-3113; (404) 464-3113.

Fort Meade, MD 20755. Established 1917; named for MG George Gordon Meade, commander of the Army of the Potomac, 1863–65; home of National Security Agency; Defense Information School; 89 other installation partners; 9,000 mil., 26,000 civ.; 5,067 acres, 15 miles northeast of Washington, D.C. DSN: 622-6261; (301) 677-6261.

Fort Monmouth, NJ 07703. Established 1917; named for Revolutionary War battle, 1778; Army center for research, development, acquisition, fielding, sustainment and integration of superior command and control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) technologies and systems for the joint warfighter; Army CECOM Life Cycle Mgmt. Cmd.; Program Executive Office (PEO)-Command, Control, Communications-Tactical; PEO-Intelligence, Electronic Warfare and Sensors; PEO-Enterprise Information Systems; Communications-Electronics Research, Development and Engineering Center; U.S. Military Academy Prep. School; 423 mil., 5,518 civ.; 1,125 acres, 50 miles south of New York City. DSN: 992-9110; (732) 532-9000.

Fort Monroe, VA 23651. Established 1819; named for President James Monroe; home of Army Training and Doctrine Cmd.; Army Accessions Cmd.; Headquarters Cadet Cmd.; Joint Task Force-Civil Support; Defense Contract Management Agency; Installation Management Cmd., Northeast Region; Army Contracting Agency, Northeast Region; School of Cadet Cmd.; Army Capabilities and Integration Center; Army Audit Field Office; Naval Surface Warfare Center Detachment Norfolk; 1,029 mil., 2,642 civ.; 570 acres, adjacent to Hampton. DSN: 680-2112; (757) 788-2112.

Fort Myer, VA 22211 (including **Fort McNair**)

Established 1862 as Fort Whipple, renamed Fort Myer in 1887 for BG Albert J. Myer, first chief of the Army Signal Corps; on 1 October 2009 Fort Myer becomes Joint Base Myer-Henderson Hall as it merges with adjacent Henderson Hall Marine Corps Base as a result of the 2005 Base Realignment and Closure decision to gain efficiencies as a joint military operation; home of the 3rd U.S. Infantry (The Old Guard); The U.S. Army Band (Pershing's Own); 7,800 mil., 1,374 civ.; 243.43 acres adjacent to the Arlington National Cemetery across the Potomac River from Washington, D.C. DSN 426-4979; (703) 696-4979. Garrison command includes Fort McNair. **Fort McNair**, Washington DC 20319, is part of the Fort Myer military community. Established in 1791; named for GEN Lesley J. McNair, Army ground forces commander killed in Normandy, 1944; home of the U.S. Army Military District of Washington; Joint Force Headquarters-National Capital Region; National Defense University; Center of Military History; Inter-American Defense College; the Commander-in-Chief's Guard (Company A, 3rd U.S. Infantry Regiment, The Old Guard); 89 acres in southwest Washington. DSN: 325-3720; (202) 685-3720.

Picatinny Arsenal, NJ 07806-5000. Established 1880; researches and develops advanced technology armament and munitions systems for joint military services and provides life-cycle engineering support for munition systems; houses the Joint Munitions and Lethality Life Cycle Mgmt. Cmd.; Armament Research, Development and Engineering Center; Program Executive Office, Ammunition; and elements of PM-Soldier Weapons and PEO Ground Combat Systems; 3,400 civilian and military personnel; 6,500 acres, located 32 miles west of New York City. DSN: 880-4021; Operator: (973) 724-4021.

Pine Bluff Arsenal, AR 71602-9500. Established 1941; produces, stores and demilitarizes conventional ammunitions; center for illuminating and infrared munitions; produces smoke munitions; Army Center for Industrial and Technical Excellence; produces, repairs and stores chemical/biological defense products; supports storage and destruction of the second-largest chemical weapons stockpile in the United States; approx. 5 mil., 1,400 civ.; 7,500 acres, 8 miles northwest of Pine Bluff. DSN: 966-3000; (870) 540-3000.

Schofield Barracks, HI 96720-4607. Established 1955; named for the Hawaiian word for "long stone"; supports training of Army, Marine Corps, reserve component


Fort Myer, Va.

and joint/combined forces in the Pacific region; 4 mil., 190 civ.; 134,000 acres, 36 miles northwest of Hilo on the island of Hawaii. DSN: 469-7110; (808) 969-7110.

Joint Readiness Training Center & Fort Polk, LA 71459. Established 1941; named for Confederate LTG Leonidas Polk, who was killed in action at Kennesaw Mountain, Ga., in 1864; home of the Joint Readiness Training Center; 4th BCT, 10th Mountain Div., 1st Maneuver Enhancement Bde.; 162nd Infantry Bde., 115th Combat Support Hospital and Bayne Jones Army Community Hospital; 9,309 mil., 6,473 civ. (including 4,511 contractors); 198,555 acres, 2 miles south of Leesville. DSN: 863-1110; (337) 531-2911.

Presidio of Monterey, CA 93944-5006. Established 1847; site of the Defense Language Institute Foreign Language Center; 392 acres in Monterey and more than 800 acres in the Ord Military Community, formerly Fort Ord, which borders Seaside Marina, Del Rey Oaks and Monterey County; 75 miles south of the San Jose International Airport. DSN: 768-5104; (831) 242-5119.

Pueblo Chemical Depot, CO 81006-9330. Established 1942; stores chemical munitions; 23,000 acres at Pueblo. DSN: 749-4135; (719) 549-4135.

Red River Army Depot, TX 75507-5000. Established 1941; repairs, overhauls, remanufactures and converts combat/tactical wheeled vehicles; operates DoD's only roadwheel and track-shoe rebuild/manufacturing facility; monitors and certifies the readiness of Hawk and Patriot missiles; 3 mil., 5,000 civ.; 19,000 acres, 18 miles west of Texarkana and 80 miles northwest of Shreveport, La. DSN: 829-2141; (903) 334-2141.

Redstone Arsenal, AL 35898-5020. Established 1941; named for the red soil of the region; home to more than 50 different international, federal and DoD organizations; core Army missions of the arsenal revolve around aviation and missile systems development and sustainment; U.S. Army Space and Missile Defense Cmd.; U.S. Army Aviation and Missile Life Cycle Mgmt. Cmd.; Program Executive Office (PEO)-Missiles and Space; PEO-Aviation; U.S. Army Ordnance Munitions and Electronics Maintenance School; FBI Hazardous Devices School; NATO Medium Extended Air Defense System Management Agency; NASA's Marshall Space Flight Center; Missile Defense Agency; 2,000 mil., 28,000 civ.; approx. 38,000 acres adjacent to southwest Huntsville. DSN: 746-2151; (256) 876-2151.

Fort Richardson, AK 99505. Established 1940; named for BG Wilds P. Richardson, pioneer explorer of Alaska; U.S. Army Alaska; 4th BCT (Abn.), 25th Inf. Div.; 5,800 mil., 917 civ.; 63,000 acres adjacent to Anchorage. DSN: (317) 384-1110; (907) 384-1110. (Fort Richardson will join with Elmendorf Air Force Base in January 2010.)

Fort Riley, KS 66442. Established 1853; named for MG Bennett Riley, who led the first military escort along the Santa Fe Trail; home of the 1st Inf. Div. and its 1st Bde., 2nd HBCT, 4th IBCT, Combat Avn. Bde. and Sustainment Bde.; more than 16,000 mil., 8,350 civ. (includes temp. construction workers); 100,656 acres just north of Junction City; 120 miles west of Kansas City. DSN: 856-3911; (785) 239-3911.

Rock Island Arsenal, IL 61299. Established 1862; home to Headquarters, Army Sustainment Cmd.; TACOM Life Cycle Mgmt. Command–Rock Island; Rock Island Arsenal Civilian Personnel Advisory Center for the East Region and North Central Area; Defense Finance and Accounting Service, Rock Island Site; Rock Island Arsenal Joint Manufacturing and Technology Center (RIA-JMTC); 317 mil., 7,000 civ.; 946-acre island in the Mississippi River between Rock Island, Ill., and Davenport, Iowa. DSN: 793-6001; (309) 782-6001.

Rocky Mountain Arsenal, CO 80022. Established 1942; responsible for contamination cleanup; 19 civ.; 3,700 acres in Commerce City, 10 miles northeast of Denver. DSN: 749-2300; (303) 289-0300.

Fort Rucker, AL 36362-5000. Established 1942; named for COL Edmund W. Rucker,

CSA, Confederate cavalry leader; home of U.S. Army Aviation Center of Excellence; Army Aviation Museum; Army Aviation Technical Test Center; Army Warrant Officer Career College; U.S. Army Combat Readiness/Safety Center; Army Aeromedical Center; Army Aeromedical Research Laboratory; Army School of Aviation Medicine; 5,584 mil., 7,496 civ.; 63,072 acres, 75 miles south of Montgomery. DSN: 558-1110; (334) 255-1110.

Fort Sam Houston, TX 78234. Established 1876; named for the first elected president of the Republic of Texas; headquarters to Army Medical Cmd., U.S. Army North/Fifth Army, U.S. Army South; 5th Recruiting Bde.; 12th ROTC Bde.; San Antonio Military Entrance Processing and Procession Station; Army Medical Department Center and School; Brooke Army Medical Center; Great Plains Regional Medical Cmd.; Headquarters, Dental Command; Headquarters, Veterinary Cmd.; the Institute for Surgical Research (trauma/burn center), the Defense Medical Readiness Training Institute; the Army Medical Department NCO Academy; U.S. Medical Information Technology Center, Forces Cmd., 519th & 418th Med. Logistics Cos. and 79th Ord. Bn. (EOD); 470th Military Intelligence Bde.; 106th Signal Bde.; 410th Contracting Bde.; Center for Health Promotion and Preventive Medicine; U.S. Army Reserve Center, 208th Regional Readiness Group, 5501st U.S. Army Hospital & 2nd Bde., 75th Div.; and Headquarters, Southwest Region, Installation Management Agency; 18,264 mil., 10,202 civ., including 2,796 contractors; 3,105 acres at San Antonio, 27,994 acres at subinstallation Camp Bullis, 35 miles northwest. DSN: 471-1211; (210) 221-1211.

Schofield Barracks, HI 96857. Established 1909; named for LTG John McAllister Schofield, commander in chief of the Army, 1888–95, whose recommendations led to the first U.S. military presence in the islands; home of the 25th Inf. Div.; U.S. Army Garrison-Hawaii, located at Wheeler Army Airfield, which supports 22 installations and various tenant units; approx. 13,000 mil., 5,000 civ.; more than 14,000 acres, 17 miles northwest of Honolulu. DSN: 456-7110; (808) 449-7110.

Fort Shafter, HI 96858. Established 1907; named for MG William R. Shafter, Civil War hero and Spanish-American War corps commander; home of U.S. Army Pacific; 8th Theater Sustainment Cmd.; 311th Signal Cmd. (Theater); 9th Mission Support Cmd.; 94th Army Air and Missile Defense Cmd.; Installation Management Cmd. Pacific Region; Army Corps of Engineers Pacific Div.; and various tenant units; 2,438 mil., 1,316 civ.; 588 acres near Honolulu. DSN: 456-7110; (808) 449-7110.

Sierra Army Depot, CA 96113-5000. Established 1942; provides worldwide expeditionary logistics support for the defenders of our nation through long-term storage; maintenance; care of supplies in storage; reset; and container management while embracing Army values; to become a modern, relevant, fully utilized military logistics installation that attracts and retains a highly skilled and diverse workforce; 820 civ.; 37,000 acres at Herlong, 55 miles north/northwest of Reno, Nev. DSN: 855-4343; (530) 827-4343.

Fort Sill, OK 73503. Established 1869; named for BG Joshua W. Sill, Union commander; home of the Fires Center of Excellence; Field Artillery School; 434th Field Artillery Bde.; 479th Field Artillery Bde.; 214th Fires Bde.; 75th Fires Bde.; 4th Bn., 3rd Air Defense Artillery Regiment (to be activated by October 2010); 16,600 mil., 7,400 civ.; 94,000 acres, adjacent to Lawton. DSN: 639-8111; (580) 442-8111.

Fort Stewart, GA 31314. Established 1940; named for BG Daniel Stewart, Georgia militia officer in the Revolutionary War; home of 3rd Infantry Division; approx. 19,000 mil., approx. 3,500 civ.; 279,000 acres at Hinesville, 40 miles southwest of Savannah. (912) 767-1411.

Fort Story, VA 23459. Established 1914; named for MG John Patton Story, former chief of the Artillery School; joined with Naval Amphibious Base Little Creek in 2009 under joint basing to create Joint Expeditionary Base Little Creek–Fort Story; amphibious and logistics-over-the-shore training site for active and reserve Army, Marine Corps and Navy components; 1,117 mil., 403 civ.; 1,451 acres, Virginia Beach. DSN: 438-7101; (757) 422-7101.

Sunny Point Military Ocean Terminal-Southport, NC 28461. Established 1955; plans, coordinates and executes the safe movement of munitions, explosives and other hazardous cargo through common-user ammunition terminals and seaports in the United States; provides technical assistance to commercial strategic seaports and expeditionary ammunition terminal operations; 3 mil., 280 civ.; 16,319 acres. DSN: 488-8556; (910) 457-8556.

Tobyhanna Army Depot, PA 18466-5000. Established 1953; DoD's largest facility for the repair, modification, test, design, fabrication and integration of the full spectrum of command, control, communications, computers, intelligence, surveillance and reconnaissance (C^4ISR) systems, and missile guidance and control and other specialized systems; designated the Army Center of Industrial and Technical Excellence for C^4ISR, and Electronics, Avionics and Missile Guidance and Control Systems; manages and operates 70 forward repair activities worldwide; approx. 24 mil., 4,000 gov. civ., 1,200 contractors, 390 tenants; 1,300 acres at Tobyhanna, 20 miles southeast of Scranton. DSN: 795-7000; (570) 895-7000.

Tooele Army Depot, UT 84074-5000. Established 1942; stores and demilitarizes conventional weapons; designs and fabricates ammunition equipment; 1 mil., 529 civ.; 23,000 acres near Tooele (pronounced "too-ella"), 35 miles southwest of Salt Lake City. DSN: 790-2211; (435) 833-2211.

Tripler Army Medical Center, HI 96859. Established 1920; named for BG Charles Stuart Tripler, medical director of the Army of the Potomac during the Civil War; largest military medical treatment facility in the Pacific Basin; performs inpatient and outpatient medical services; more than 4,000 military, civilian and contractor personnel; 360 acres, near Honolulu. (808) 433-6661/6662.

Umatilla Chemical Depot, OR 97838-9544. Established 1941; named for an American Indian tribe; destroys chemical munitions stored at the depot; 1,200 employees; 20,000 acres, 11 miles west of Hermiston. (541) 564-8632.

U.S. Army Garrison-Detroit Arsenal, Warren, MI 48397-5000 (formerly listed as U.S. Army Garrison-Michigan). Established 1940; under the Installation Management Command Northeast Region; supports the U.S. Army TACOM Life Cycle Management Cmd.; Program Executive Office (PEO) Ground Combat Systems; PEO Combat Support and Combat Service Support; Tank Automotive Research Development and Engineering Center; Program Manager Unit of action; and other government agencies within Michigan; 170 mil., 5,031 U.S. civilians and 817 contractors; 169 acres at Warren, 20 miles north of downtown Detroit and 20 miles south of the Selfridge Air National Guard Base. DSN: 786-5000; (586) 574-5000.

U.S. Army Soldier Systems Center, Natick, MA 01760. Commonly known as Natick Labs, this facility performs research and development in core technologies for all the services—textile technology, interactive textiles, nanotechnology, biotechnology, airdrop technology, food science, human physiology and warrior sys-

2010 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its fifteenth ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2009.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints, color prints or color slides. Photographs must not be tinted or altered. (Send digital photos to jdow@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The smallest format for slides is 35mm, and slides must be in plastic or paper mounts.
7. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, Social Security number (for identification and tax purposes), address and telephone number, and caption information.
8. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
9. Entries must be postmarked by June 30, 2010. Letters notifying the winners will be mailed in September.
10. Entries will not be returned.
11. Employees of AUSA and their family members are not eligible.
12. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
13. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jeremy Dow (jdow@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.



Waterways Experiment Station, Miss.

science, human physiology and warrior systems integration—and develops, manages, fields and sustains products and systems to support all military services; 20 miles west of Boston. DSN 256-4000; (508) 233-4000.

Fort Wainwright, AK 99703. Established 1961; named for GEN Jonathan M. Wainwright, hero of Bataan; home of 1st Stryker Brigade Combat Team, 25th Inf. Div., and Task Force 49 (a brigade-sized aviation unit); 7,200 mil., 1,300 civ.; 1,599,738 acres adjacent to Fairbanks. DSN: (317) 353-1110; (907) 353-1110.

Walter Reed Army Medical Center, Washington, DC 20307. Established 1909; named for MAJ Walter Reed, conqueror of yellow fever; site of Walter Reed Army Medical Center; Armed Forces Institute of Pathology. DSN: 662-3501; (202) 782-3501.

Watervliet Arsenal, NY 12189-4000. Established 1813; oldest continuously active arsenal in the United States. Became nation's "cannon factory" in 1887. Conducts research, development and manufacture of artillery weapons with its partner, the U.S. Army's Benét Laboratories; 1 mil., 862 civ. with arsenal and Benét Laboratories; 161 mil., 302 civ. in 30 other tenant organizations; 143 acres at Watervliet, 7 miles north of Albany. DSN: 974-5111; (518) 266-5111.

Waterways Experiment Station, MS 39180. Established 1929 by Army Corps of Engineers; headquarters of the Army Engineer Research and Development Center. Conducts research supporting the warfighter and engineering and environmental sciences supporting our nation; 2 mil., 1,600 civ.; 673 acres in Vicksburg. (601) 634-3111.

West Point, NY 10996. Oldest continuously garrisoned military installation in the United States; first garrisoned by the Continental Army in January 1778; home of the U.S. Military Academy since March 16, 1802, and the U.S. Army Center of Excellence for the Professional Military Ethic; more than 5,500 mil. (including 4,400 members of the U.S. Corps of Cadets), 2,600 civ.; 16,000 acres on the west bank of the Hudson River, 55 miles north of New York City. DSN 688-4011; (845) 938-4011.

White Sands Missile Range, NM 88002. Established 1945; national test range; 1,380 mil., 2,475 civ., 2,906 contractor personnel; 3,200 square miles with main facilities 27 miles east of Las Cruces, 40 miles north of El Paso, Texas. DSN: 258-2121; (575) 678-2121.

Yakima Training Center, WA 98901. Established 1941; subinstallation of Fort Lewis, Wash.; supporting joint and combined arms maneuver training and ranges for active and reserve component units and allies; 150 mil., 400 civ.; 327,000 acres, 8 miles northeast of Yakima, 168 miles southeast of Tacoma. DSN: 638-3205; (509) 577-3205.

Yuma Proving Ground, AZ 85365. Established 1943; performs multipurpose testing for many types of weapon systems and munitions; 175 mil., 2,400 civ.; 1.3 million acres with main facilities 26 miles northeast of Yuma. DSN: 899-2151; (928) 328-2151.

Major Reserve Component Training Sites

This listing does not include active posts maintained by the Army primarily for reserve component training; these will be found in the directory of active Army installations. Reserve component units also conduct a portion of their annual training on federal posts that are continuously occupied by active Army units. Commercial telephone numbers are for operator assistance at the sites listed; DSN numbers are for military points of contact.

Camp Atterbury Joint Maneuver Training Center, Edinburgh, IN 46124. DSN: 569-2433; (812) 526-1499.

Camp Blanding Joint Training Center, Starke, FL 32091-9703. DSN: 822-3421; (904) 682-3421.

Camp Bowie MTC Complex, Brownwood, TX 76801. (512) 782-7635.

Fort Buchanan, Puerto Rico 00934. DSN: 740-3403; (787) 707-3403.

Fort Chaffee Maneuver Training Center, Fort Chaffee, AR 72905. (479) 484-2934.

U.S. Army Garrison-Fort Devens, Devens, MA 01434-4424. DSN: 256-2126; (978) 796-2126.

Fort Dix, NJ 08640. DSN: 562-1011; (609) 562-1011.

Camp Edwards, Mass. Mil. Res., MA 02542-5003. DSN: 557-5885; (508) 968-5885.

Gowen Field, Boise, ID 83705. DSN: 422-5755; (208) 272-5755.

Camp Grayling Joint Maneuver Training Center (Heavy), MI 49739-0001. DSN: 623-3100; (989) 344-6100.

Camp Gruber, Braggs, OK 74423-0029. (918) 549-6001.

Camp Guernsey Joint Training Center, Guernsey, WY 82214-0399. DSN: 344-7786; (307) 836-7786.

Fort Hunter Liggett U.S. Army Combat Training Center, CA 93928. (831) 386-2505.

Fort Indiantown Gap, Annville, PA 17003-5002. DSN: 491-2000; (717) 861-2000.

Los Alamitos Army Airfield, Los Alamitos, CA 90720-5146. DSN: 972-2571; (562) 795-2571.

Fort McCoy, WI 54656-5000. DSN: 280-1110; (608) 388-2222.

Camp Parks U.S. Army Combat Support Training Center, Camp Parks, CA 94568. (925) 875-4650.

Camp Perry Joint Training Center, Port Clinton, OH 43452. (419) 635-4021.

Fort Pickett-Army National Guard Maneuver Training Center, Blackstone, VA 23824-9000. DSN: 438-8621; (434) 292-8621.

Camp Rilea, Warrenton, OR 97146-9711. DSN: 355-4000; (503) 861-4000.

Camp Ripley, Little Falls, MN 56345-4173. DSN: 871-2726; (320) 616-2726.

Headquarters Camp Roberts, San Miguel, CA 93451-5000. DSN: 949-8000; (805) 238-3100.

Camp Joseph T. Robinson, North Little Rock, AR 72199-9600. DSN: 962-5100; (501) 212-5100.

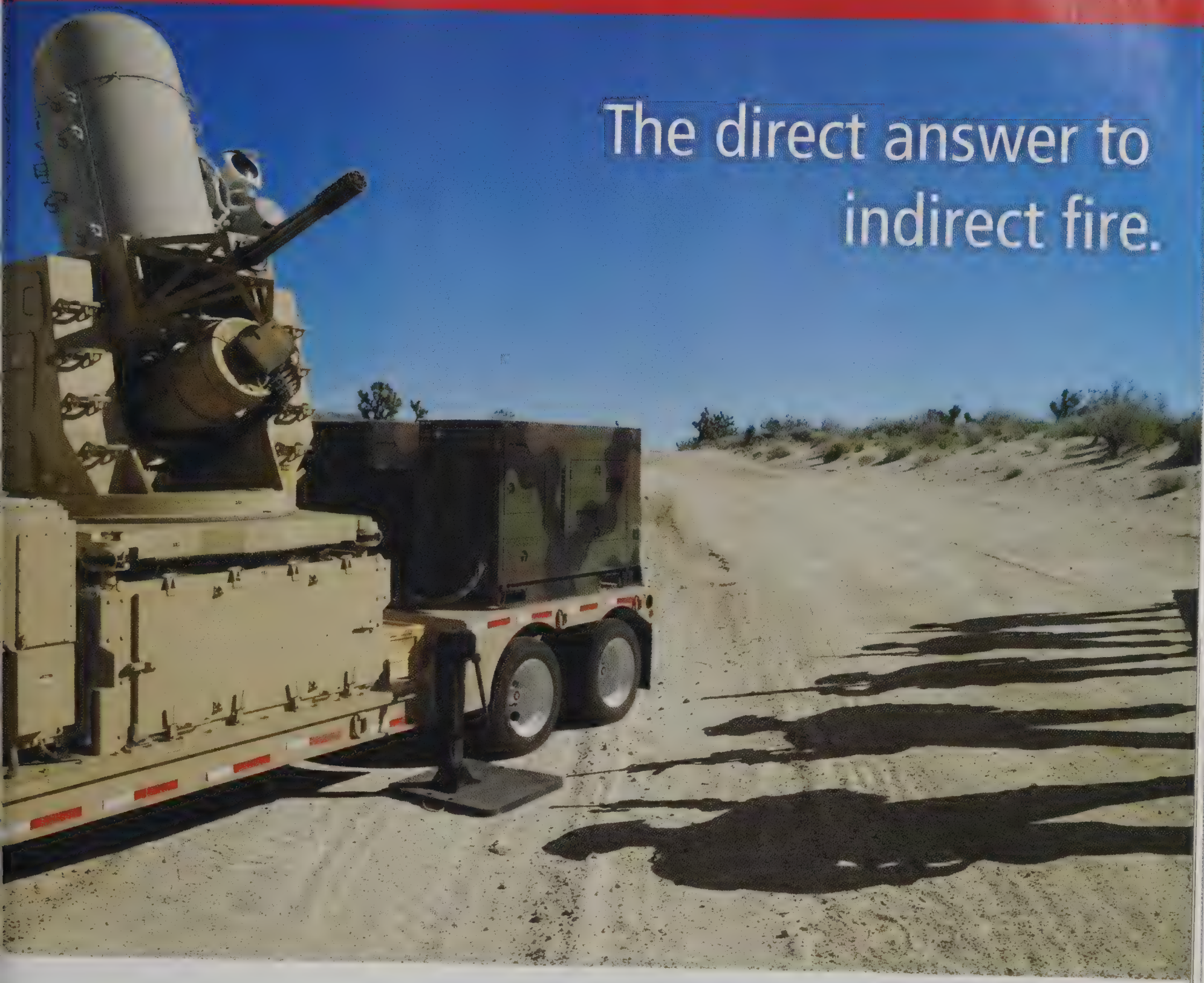
Camp Santiago, Salinas, Puerto Rico, 00751-1166. (787) 824-7400.

Camp Shelby, MS 39407-5500. DSN: 286-2000; (601) 558-2000.

Camp Swift, Bastrop, TX 78602-9737. (512) 782-7114.

Camp W.G. Williams, Riverton, UT 84065-4999. DSN: 766-5400; (801) 878-5400.

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ARMY WEAPONS AND EQUIPMENT



Dennis Steele/ARMY Magazine

Contents

The 2009 ARMY *Green Book* Weapons and Equipment Directory continues its own transformation to provide a glimpse at some representative systems supporting today's warfighters.

In addition to a continuing reorganization to reflect Program Executive Office structures more accurately, the 2009 directory expands critical areas of brigade combat team modernization and robotic systems developments.

This directory has attempted to balance representative examples of both existing and emerging systems to provide readers with a broad appreciation of warfighter systems' capabilities. Due to emerging technologies and unfolding budgetary decisions, some new program listings will have to wait until next year's directory.

The 2009 Weapons Directory remains a work in progress. Comments and suggestions regarding the ongoing transformation of these reference pages are always appreciated.

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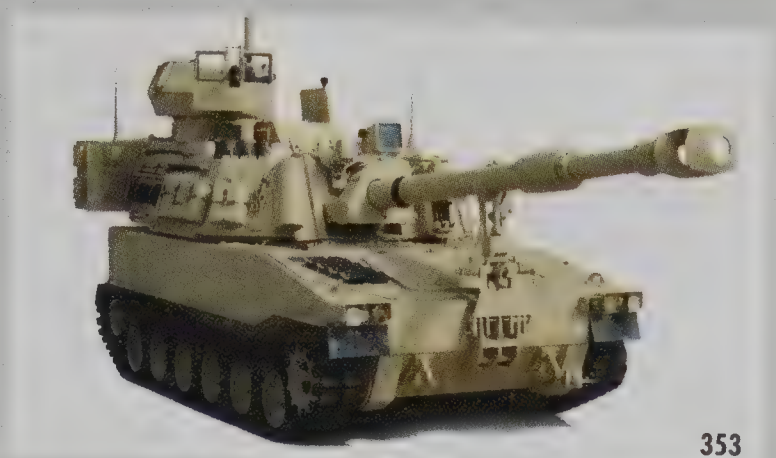
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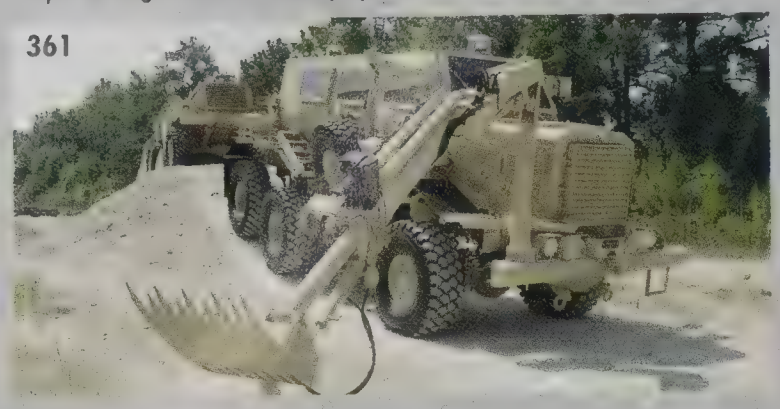
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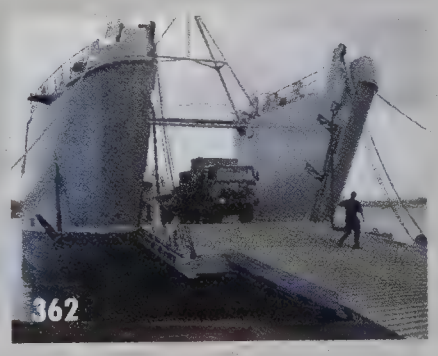
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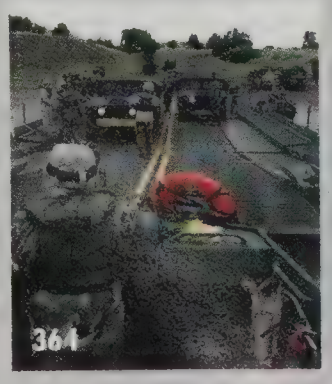

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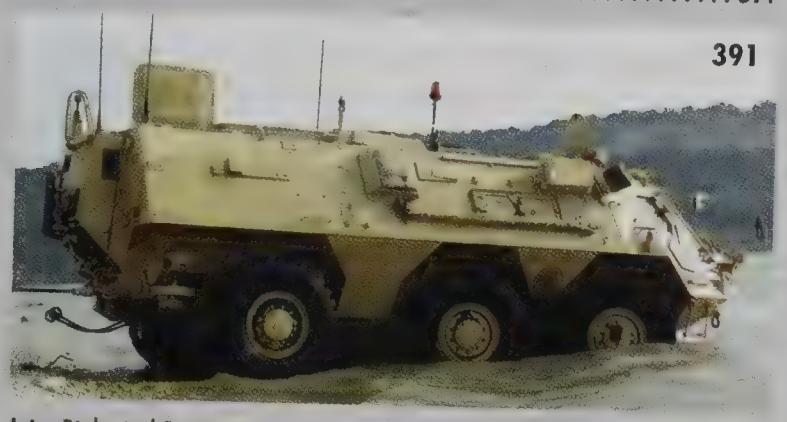

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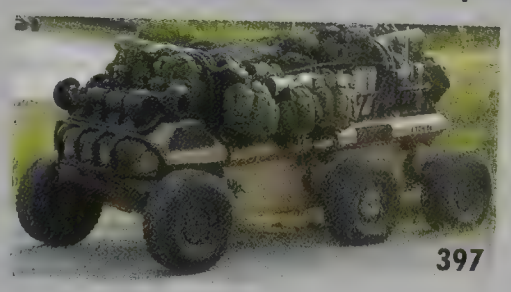

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AIRCRAFT

Rotary Wing

The **AH-6/MH-6 Little Bird (Cayuse) Helicopter** is in service with the Army's 160th Special Operations Aviation Regiment (Airborne) (SOAR). Following service in Vietnam, the Army's fleet of OH-6 light observation and command helicopters (LOACH) was reassigned to Army National Guard units. With their excellent roll-on/roll-off mobility and extremely high power-to-weight ratios, however, the aircraft subsequently were tapped for special operations applications in 1980.

Capability upgrades include performance, avionics, navigation, communications, targeting, weapons and night operations. Although primarily equipped with the 7.62 mm minigun or Hydra 70 (2.75-inch) rocket system, the AH-6/MH-6 can accommodate a range of gun and rocket options.

The AH-6J/MH-6J mission-enhanced Little Bird (MELB) program is a major modification to the AH-6/MH-6 fleet. The modification is packaged as a kit that replaces existing components on the aircraft. The new MELB aircraft has a six-blade main rotor system, a four-blade tail rotor, an improved drive train and the Allison 250-C30R3 full-authority, digital-engine control (FADEC). The MELB also incorporates an improved landing gear, crashworthy fuel cells, enlarged rear doors and external extended-range fuel tanks.



AH-64D Apache Longbow

The **AH-64A Apache Helicopter** provides day, night and adverse weather attack helicopter capability. The Apache is the Army's primary attack helicopter. It is a quick-reacting, airborne weapon system that can fight both close and deep to destroy, disrupt or delay enemy forces. The Apache first entered service inventories in 1984.

The aircraft is designed to fight and survive throughout the world. It is equipped with a target acquisition designation sight and a pilot night-vision sensor that permit its two-man crew to navigate and attack in darkness and adverse weather. The Apache's principal mission is to destroy high-value targets with the Hellfire missile. It also is capable of employing a 30 mm M230 chin-mounted automatic cannon and Hydra 70 rockets that are lethal against a variety of targets.

The Apache has a maximum speed of 145 knots. It has a maximum gross weight range of 240 nautical miles (A model) and 230 nautical miles (D model) with range extension capability using internal and external tanks. The Apache has a full range of aircraft survivability equipment and the ability to withstand hits from rounds up to 23 mm in critical areas. Apache ordnance consists of the Hellfire Missile (RF/SAL versions), 2.75-inch rockets (all versions) and 30 mm HEI rounds.

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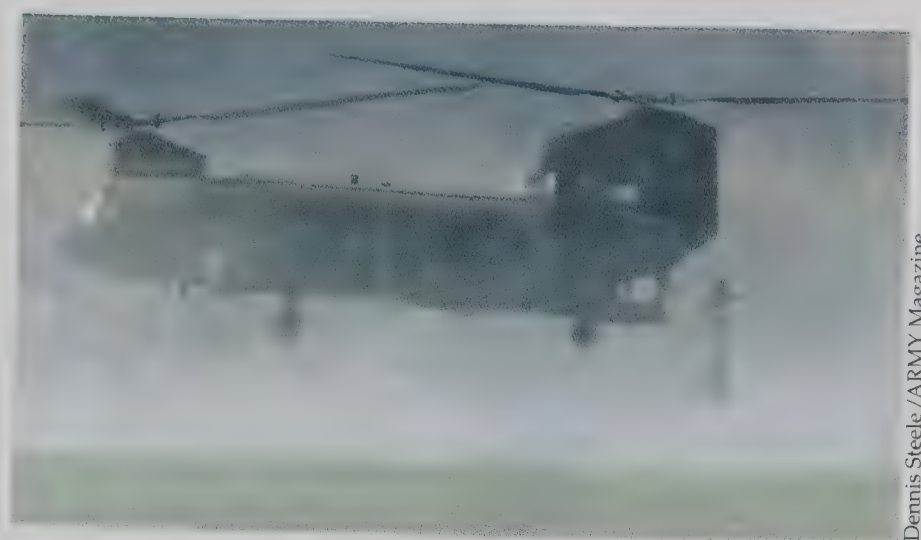
MAT McLane Advanced Technologies

The **AH-64D Longbow** is being fielded through a combination of new production and remanufacture of AH-64A aircraft. The AH-64D incorporates the Longbow fire-control radar (FCR), capable of being used day or night, in adverse weather and through battlefield obscurants. The AH-64D consists primarily of the integration of a mast-mounted millimeter-wave fire-control radar, a radar frequency interferometer and a radar frequency fire-and-forget Hellfire missile.

The Longbow's digitized target acquisition system provides automatic detection, location, classification, prioritizing and target handover. The AH-64D cockpit is redesigned to digitize and multiplex all systems.

The manpower and personnel integration program (MANPRINT) crew stations have multifunction displays to reduce crew workload and increase effectiveness. The AH-64D provides a truly coordinated rapid-fire (16 separate targets within one minute) capability to the maneuver force commander on a 24-hour basis and in any conditions.

July 2008 saw the first flight of the Apache Longbow Block III prototype aircraft. Slated for fielding beginning in 2011, the Block III will feature: Future Force connectivity–seamless global information grid communications; Level IV unmanned aerial vehicle control; increased survivability–extended range sensors and weapons; cognitive decision aiding system; improved aircraft performance; and reduced operations and support cost and logistics footprint.



Dennis Steele /ARMY Magazine

CH-47 Chinook

The mission of the Army's **CH-47D Chinook Helicopter**, a tandem-rotor heavy-lift helicopter, is to transport weapons, ammunition, equipment, troops and other cargo in general support of combat units and in operations other than war. The D model of the aircraft is the result of refurbishment and conversion from previous models. It has become the assault aircraft of choice in the high-altitude battlefields of Afghanistan during the war on terrorism. In peacetime the aircraft provides critical disaster relief by supporting firefighting, rescue and supply efforts.

Ongoing modifications to the CH-47D fleet include a powerplant upgrade to T55-GA-714A engines, crashworthy extended-range fuel system II (ERFS II), engine air particle separators (EAPS) and ALE-47 countermeasure dispensing system.

A special operations variant, the MH-47E, features added fuel capacity, an air-to-air refueling probe and specialized communications, navigation, avionics and night-vision subsystems.

The **CH-47F Improved Cargo Helicopter (ICH)** is being procured through both new build and remanufactured processes. The Boeing Company's CH-47F helicopter features a newly designed, modernized air-

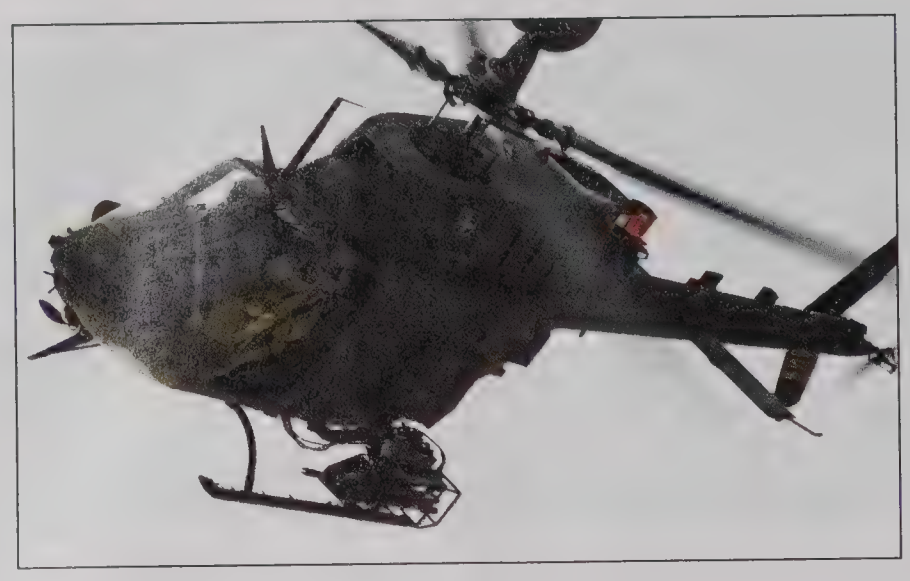
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OH-58D Kiowa Warrior

frame, a Rockwell Collins common avionics architecture system cockpit and a BAE digital advanced flight control system. The advanced avionics provide improved situational awareness for flight crews with an advanced digital map display and a data transfer system that allows storing of preflight and mission data. Improved survivability features include common missile warning and improved countermeasure dispenser systems.

Powered by two 4,868-hp Honeywell engines, the new CH-47F can reach speeds greater than 175 mph and transport payloads weighing more than 21,000 pounds. The CH-47F, with the Robertson Aviation extended-range fuel system, has a mission radius greater than 400 miles.

First unit fielding of the CH-47F began in July 2007.

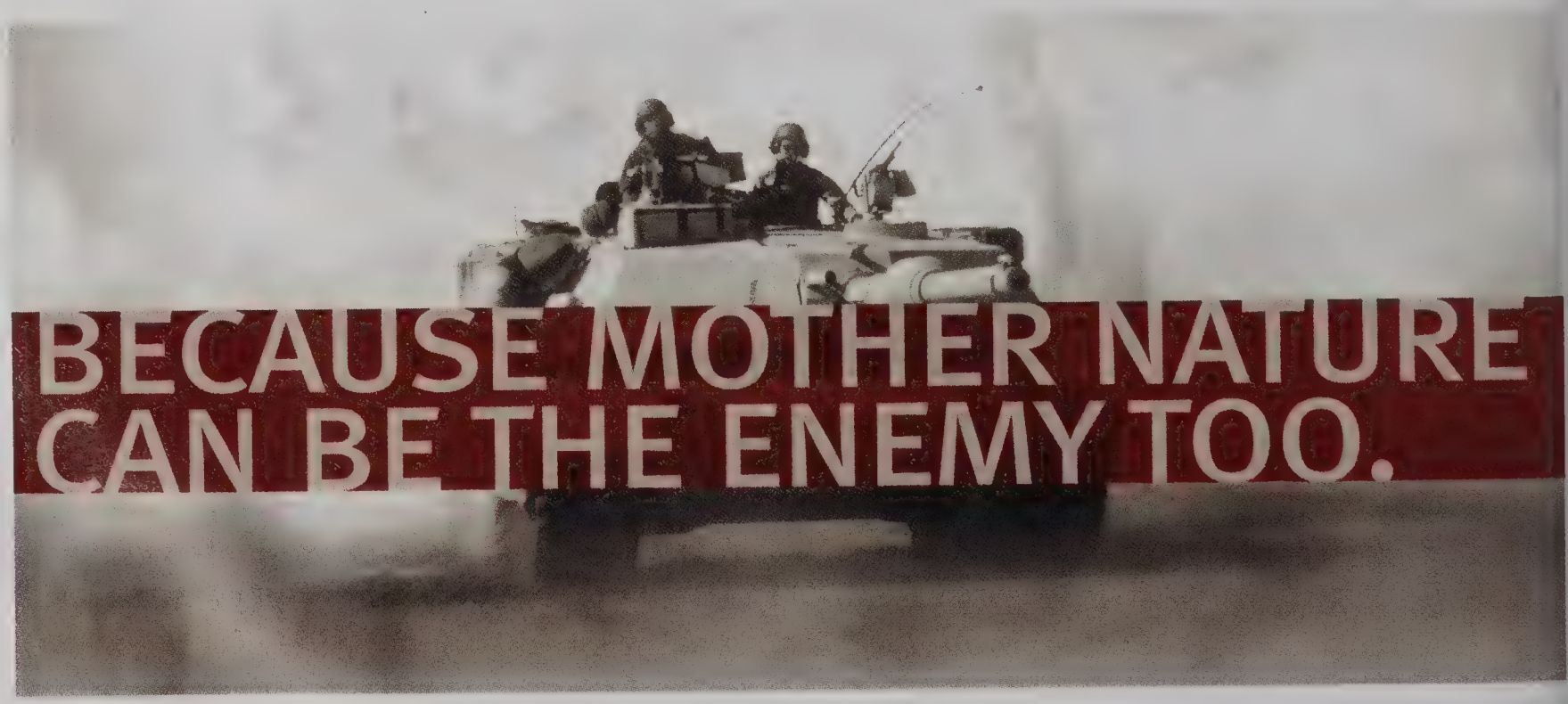
The **MH-47G** is the latest special operations variant, building on the capabilities of the MH-47E and adding a digital Common Avionics Architecture System (CAAS) cockpit as well as enhanced aircraft survivability equipment. The first MH-47G aircraft were deployed to Afghanistan in February 2007.

The **OH-58D Kiowa Warrior Helicopter** fills the armed reconnaissance role for attack helicopter and air cavalry units. It was the only practical armed reconnaissance aircraft in the Army inventory until the armed reconnaissance helicopter (ARH) fielding began in fiscal year 2007. It is capable of performing reconnaissance, security, command and control, target acquisition/designation and defensive air combat missions.

The Kiowa Warrior adds armed reconnaissance, light-attack and multipurpose light helicopter (MPLH) capabilities that permit rapid deployment to the basic OH-58D Kiowa mission capabilities. The OH-58D has a mast-mounted sight that houses a thermal-imaging system, low-light television and a laser rangefinder/designator. A highly accurate navigation system permits precise target location that can be handed over to other engagement systems via the airborne target handover system. The laser designator can provide autonomous designation for the laser Hellfire missile or remote designation for other laser-guided precision weapons.

The **TH-67 Creek Helicopter** is the Army's primary platform for initial rotary-wing training at the U.S. Army Aviation Center. Based on a commercial Bell Jet Ranger design, the TH-67 replaced the OH-58C previously used for the training mission. The TH-67 comes in three variants: TH-67 VFR, TH-67 IFR and TH-67A+. It has dual-control front seats for the instructor pilot and one student plus a rear seat for a second student.

The **UH-60 Black Hawk Helicopter** is





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the Army's assault and utility helicopter. Three major variants exist. The UH or utility version of the helicopter provides general air assault and utility support. The MH version supports Special Forces roles and missions including a gunship variant identified as the MH-60 direct action penetrator (DAP). While the medical evacuation (MEDEVAC) mission is conducted currently on UH-60A model aircraft outfitted with mission kits, future MEDEVAC Black Hawks will have medical equipment integrated into the aircraft and will be designated HH series aircraft.

The Black Hawk is the primary helicopter for air assault, general support and aeromedical evacuation units. It has enhanced the overall mobility of the Army through its dramatic improvements in troop capacity and cargo-lift capability over the UH-1H Huey, which it replaced. An entire fully equipped, 11-man infantry squad can be lifted in one aircraft, faster and in more inclement weather conditions than in the Huey, allowing ground commanders to quickly shift forces to increase battlefield operational tempo to overmatch the enemy's. The Black Hawk can also reposition a 105 mm howitzer, its crew of six and up to 30 rounds of ammunition in a single lift, allowing the rapid massing of overwhelming combat power.

The Black Hawk was designed with ease of maintenance and survivability in mind. The aircraft's critical components and systems are armored or redundant so that it can withstand multiple small-arms hits. In the event of a crash, its airframe progressively crushes on impact to protect the passengers and crew.

The **UH-72A Lakota Light Utility Helicopter (LUH)** provides general aviation support for active TDA units in the mission areas of training, testing and MEDEVAC support. The LUH also provides the Army National Guard a platform to provide general aviation support in the mission areas of homeland security and generating force MEDEVAC. The LUH does not deploy into hostile combat environments. Following full materiel release authorization, the Army equipped its first UH-72A operational unit in June 2007.

xed Wing

In addition to the helicopter resources ted previously, the Army uses a variety fixed-wing assets, including the **C-12 ng Air**, which serves as the service's rrent short-range utility aircraft deigned to fill air transportation requirents out to 800 nautical miles (NM). The ndevelopmental aircraft platform proles an efficient all-weather transport for mmanders and staff, and low-volume, gh-priority parts and equipment. The gest modification program now under y involves the upgrade of 27 C-12F cockpits with newly digitized capabilities.

The **C-12 King Air/RC-12 Guardrail** configuration carries the Guardrail common sensor system and provides standoff communications intelligence (COMINT), electronics intelligence (ELINT), and intercept and location targeting to enhance corps commanders' warfighting capability. In addition, the RC-12 provides national-level targeting information.

The **EO-5 Airborne Reconnaissance Low (ARL)** is based on a modified DeHavilland-7 aircraft. The system comes in two configurations: ARL-C (COMINT) with a complete COMINT sensor package, and ARL-M (Multi-INT) that combines both COMINT and imagery capability.

The Army's **C-20** and **C-37 Citation Long-Range/Executive Transport Jets** provide global transport and command-and-control support to senior executives from the Department of the Army staff, commanders and other high-ranking government officials for flights up to 4,200 NM.

The **C-23 Sherpa** aircraft provides troop and equipment transport, airdrop and medical evacuation for cargo weighing up to 7,820 pounds. Eight of these aircraft are authorized per theater aviation battalion to provide the commander with the essential ability to move troops and equipment rapidly within the theater of operations. The C-23 can also operate from short, unpaved airfields.



Sky Warrior-Block 0



General Atomics Aeronautical Systems, Inc.

The **UC-35A Cessna Citation Ultra/UC-35B Encore** is an efficient, medium-range (800-1,800 NM), all-weather airplane that transports commanders and staffs so that they can perform command, liaison, administration and inspection duties. This aircraft is also used for the movement of high-priority personnel and cargo. Eight UC-35s are authorized per theater aviation company.

The **C-26 Fairchild Metro Liner** was procured as a cost-effective carrier for high-volume travel routes. The aircraft can carry up to 20 passengers or be used for cargo movement.

The **Future Cargo Aircraft (FCA)** is a new start initiative to replace the C-23. FCA will be a nondevelopmental, strictly commercial off-the-shelf program. The FCA will provide rapid-response cargo transport of soldiers and equipment, airdrop and medical evacuation for cargo weighing up to 18,000 pounds. The FCA will be capable of short take-off and landing (STOL) and also able to operate from unimproved runways.

Unmanned Aerial Systems (UAS)

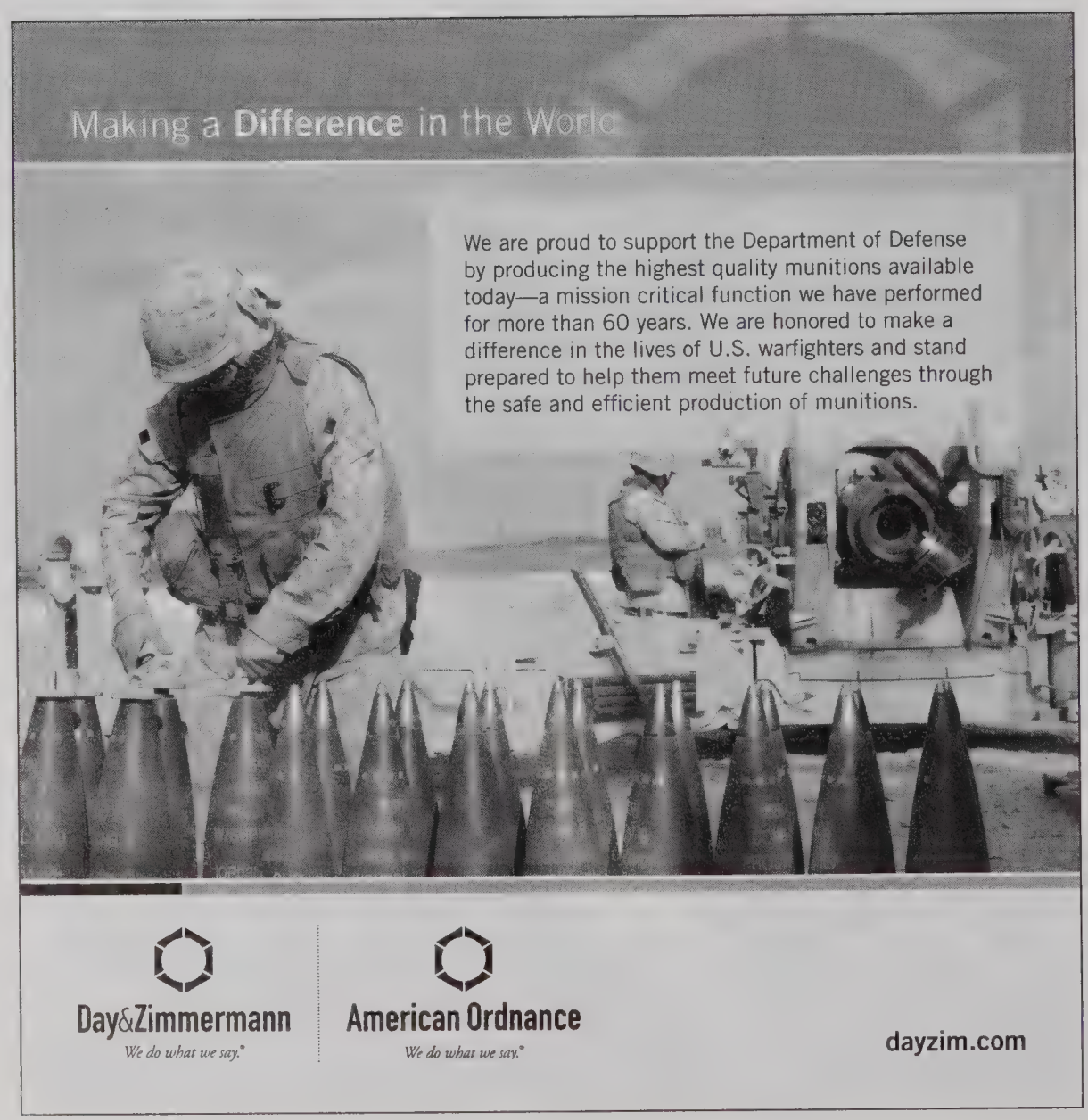
Army Unmanned Aerial Systems (UAS) support land warfare operations across the spectrum of conflict. Infantry, scout, intelligence, aviation, artillery, maneuver and even medical units benefit from the availability of UAS. Typical missions include intelligence, surveillance and reconnaissance (ISR), battle damage assessment, targeting, persistent stare for continued operations, convoy protection and antiambush (improvised explosive device or IED).

The **RQ-5A Hunter UAS**, manufactured by Northrop Grumman, is the Army's longest-serving UAS, having seen action in Operation Iraqi Freedom and in Kosovo. The Army has installed, demonstrated or tested 23 different payloads on the Hunter, making it one of the most versatile UAS in the world. The Hunter air vehicle is a fixed-wing, twin-tail boom aircraft with a dual rudder. The Hunter is capable of 18-hour flight duration with an electro-optic/infrared (EO/IR) sensor or eight hours with a 250-pound payload. The EO/IR—the main payload for the Hunter—is available in both 280 mm and 770 mm focal lengths. Hunter is the only Department of Defense UAS to use a dual-engine system. The MotoGuzzi gasoline engines are being replaced with three-cylinder commercial JP-8 fuel engines.

A wet center-wing capability has been added to the Hunter air vehicle, extending the base Hunter wingspan by approximately 60 inches, thus increasing lift, rate of climb and service ceiling from 15,000 feet to 18,000 feet mean sea level. The wet wing is equipped with hard points with the capability to carry 130 pounds each, facilitating Hunter weaponization. When the wet wing is not used to carry weapons, it can be loaded with 110 liters of fuel to increase air vehicle endurance by six hours.

The **RQ-7A Shadow Tactical UAS** is a DoD acquisition success story. The Army reduced the period for system design and development to full-rate production decision, including a successful initial operational test and evaluation, Office of the Secretary of Defense test and evaluation report, and joint interoperability certification of the communications in the "one system" ground control station, to just 33 months. The Army's deputy chief of staff G-3 has directed that every maneuver brigade in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) will be equipped with the tactical UAS (TUAS) system. The Shadow is manufactured by AAI Inc.

The Shadow system consists of four air vehicles (AV) with day/night payloads, two ground control stations (GCS) with ground data terminals (GDT), one portable ground control station (PGCS) with portable ground data terminal (PGDT), two tactical automated landing systems, launcher, air vehicle transport (AVT), and



additional ground support equipment and vehicles for personnel transport. The TUAS platoon consists of 22 personnel with the ability to sustain flight operations on a 24-hour basis. The AV takes off from a launcher and lands autonomously in an area slightly longer than a soccer field. Annotated imagery can be transmitted in near-real time to support the commander's missions. The system is transported in three Humvees with shelters, one AVT, two troop-carrying Humvees and three trailers, and can be deployed in three C-130s. A contractor logistics support team, transported in a mobile maintenance facility within a sheltered Humvee and trailer, supports the system.

The **RQ-11B Raven Small UAS** is another example of rapid acquisition in support of OIF and OEF forces. In just 20 weeks from funding, the first of these battery-operated, 4.5-pound UAS was deployed to forces in Afghanistan. Each combat battalion in OIF and OEF will have small UAS.

The Raven system consists of three aircraft, one ground control station, batteries and three sets of sensors: high-resolution day camera, high-resolution night imager and a side-view thermal imager. The aircraft are hand-launched and use autoland recovery.

The system is transported in two suitcase-size carrying cases. The system provides company- and platoon-level reconnaissance, surveillance, target acquisition and battle damage assessment.

The **Improved-GNAT (I-GNAT-ER) [Extended Range]** is a General Atomics Aeronautical Systems product the Army procured in 2003. The Army I-GNAT system consists of three modified I-GNAT aerial vehicles (AVs), one modified I-GNAT shelter, two portable ground data terminals (PGDTs) and associated ground support equipment. The system can provide up to 25 hours of operations, carry up to 450 pounds of payload, has a service ceiling of 25,000 feet mean sea level and is controlled by a C-band data link. The Army I-GNAT was deployed to OIF just 10 months after contract award.

The **Sky Warrior Extended Range/Multi-Purpose (ER/MP) UAS** will replace and improve upon the Hunter. Sky Warrior, a derivative of the combat-proven Predator, will be a mainstay of the division/corps commander's battle-set for land warfare operations. Although the program is still in system development and demonstration (SDD) phase, the first two Sky Warrior "Block 0" UAVs became operational in Iraq in late spring 2008.

Air Traffic Control Systems

Army air traffic services provide Army aviation the assets required to ensure safety and survivability on the modern battlefield. Tactical air traffic control (ATC) supports air and land component commanders' automated airspace command and control requirements and ATC for aircraft operating in terminal and rear operation areas. In turn, air traffic services support is critical to fixed-base force projection platforms, a function that mitigates risks to Army aircraft operating from Army airfields worldwide.

To meet these needs, the Office of the Product Manager for Air Traffic Control Systems (PM ATC)—assigned to the Aviation and Missile Command at Redstone Arsenal, Ala.—manages the modernization of the tactical and nontactical ATC equipment.

Tactical Systems

Major tactical ATC programs include the air traffic navigation, integration and control system (ATNAVICS), tactical airspace integration system (TAIS) and the mobile tower system (MOTS).

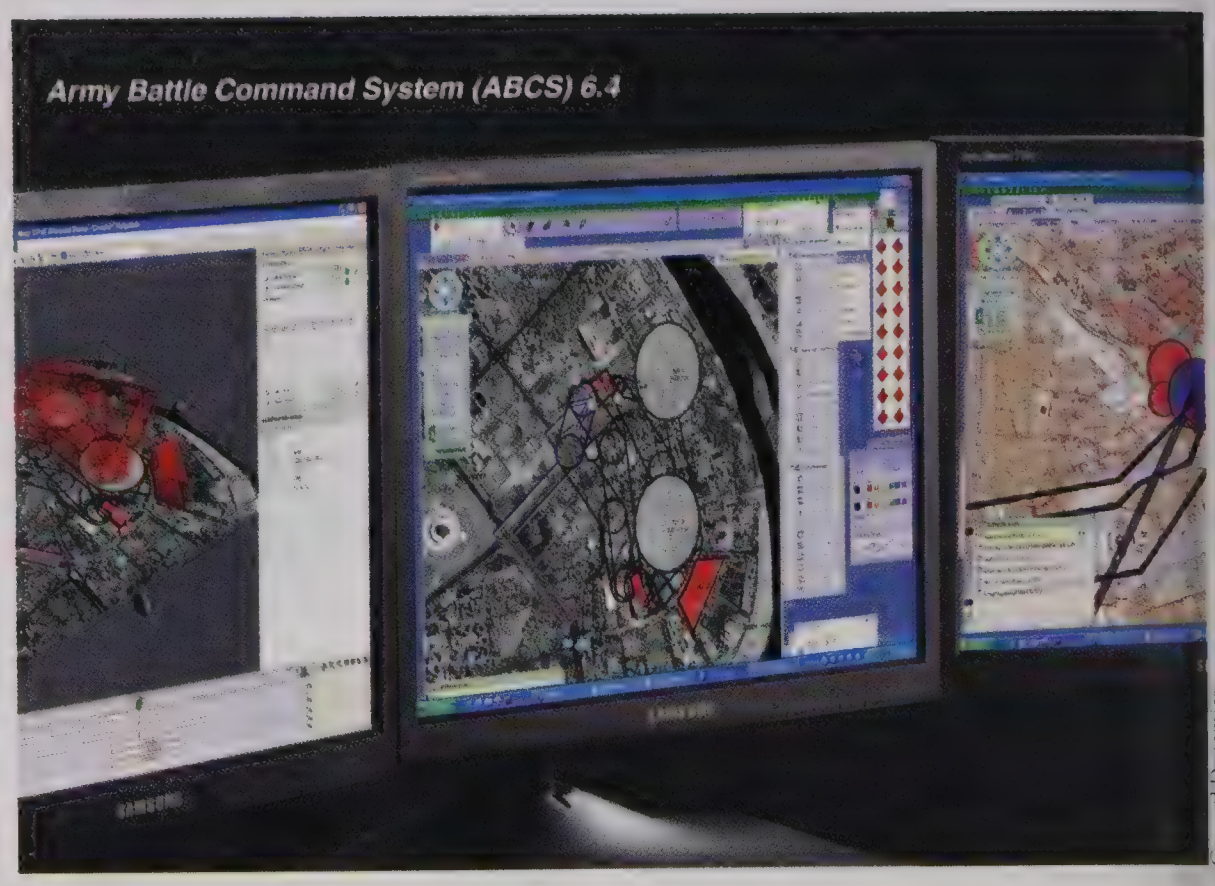
The **AN/TPN-31 Air Traffic Navigation, Integration, Coordination System (ATNAVICS)** is a Humvee-mounted, survivable radar system that will support a highly mobile tactical area surveillance and precision-approach air traffic control system. It will replace the technologically obsolete and unsupportable landing control central (AN/TSQ-71B). The system will provide expeditious air traffic flow, permitting continuous unimpeded opera-



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tions and will provide area navigational assistance, integrate air traffic during joint/combined operations and coordinate air movement within the Army airspace command and control (A^2C^2) system. The ATNAVICS will facilitate the safe handling of air traffic at Army terminal airfields, landing sites or zones at division, corps and echelons above corps. All components of the system can be loaded onto a single C-130 aircraft for deployment to any location. In addition, the system can be sling-loaded by a CH-47.

The **AN/TSQ-221 Tactical Airspace Integration System (TAIS)** is the most recently fielded modern tactical ATC system. In addition to being an ATC system, the TAIS is also the Army battle command system (ABCS) that will perform the A^2C^2 function. The TAIS will provide the commander with an automated capability to effectively, efficiently and safely manage the use of airspace over the area of operations for which he is responsible. TAIS will be located at division, corps and echelons above corps, integrating ATC and A^2C^2 capabilities between ATC systems and the ABCS.

TAIS is currently fielded at Fort Hood, Texas, and Fort Bragg, N.C., and replaces the AN/TSC-61B flight control central system.

The **AN/MSQ-135 Mobile Tower System (MOTS)** will be a highly mobile tactical air traffic control system designed to be rapidly set up and to quickly establish air traffic services during the initial phases of deployment and sustain those services throughout operations and redeployment. The system replaces the AN/TSW-7A and AN/TSQ-70A.

The AN/MSQ-135 MOTS system will be mounted on a Humvee and be C-130-deployable and helicopter sling-loadable, with digital jam-resistant communications. The MOTS will provide air traffic services in airspace designed for air traffic movement at terminal areas of the division, corps and echelons above corps during wartime and stability and support operations.

MOTS will provide numerous services, including sequencing and separating arriving and departing aircraft, coordinating instrument meteorological condition recovery of aircraft, coordinating in-flight emergencies, search and rescue (including combat missions).

In peacetime, the MOTS will support Army air traffic services training requirements and aviation units during tactical field training exercises, along with supporting other agencies, host nations, joint services and other Army missions. The tactical ATC systems are derivatives of commercial off-the-shelf technologies or derivatives of other military systems. By using this approach, the PM ATC has maximized the effectiveness and efficiency of funding allocated to the air traffic equipment inventory modernization.

The **AN/TSQ 198 Tactical Terminal Control System (TTCS)** enhances aircrew safety by providing initial air traffic services at remote landing sites and drop zones.

The system includes secure communications equipment for aircraft separation and ground control, a meteorological measuring system for basic weather information and a precision location capability. It is a retrofit to the ARC-220.

Fixed-Base Programs

The major fixed-base ATC programs include the national airspace system (NAS) modernization programs: the digital airspace surveillance radar (DASR), the DoD advanced automation system (DAAS), the voice communications switching system

(VCSS) and the fixed-base precision approach radar (FBPAR).

The **AN/FPN 67 Digital Airspace Surveillance Radar (DASR)**, or GPN-30, is a new terminal air traffic control radar system that replaces current analog systems with new digital technology. DASR will replace the Army's AN/FPN-66A on a one-for-one basis, and it is also being considered for use at other locations where airport surveillance radar capability will be lost when the AN/FPN-40s are decommissioned. These older radars, some as old as 20 years, are being replaced to improve reliability, provide additional weather data, reduce maintenance cost, improve performance and provide digital data to new digital automation systems for presentation on air traffic controller displays.

Also under the DoD NAS procurement effort is the **DoD Digital Advanced Automation System (DAAS)**. DAAS is DoD's version of the FAA's standard terminal automation replacement system (STARS). DAAS/STARS replaces the automated radar terminal system and other capacity-constrained, older terminal automation systems in approach control facilities and associated towers. Controllers providing ATC services to aircraft in the terminal areas will use DAAS. Typical terminal ATC services include separating and sequencing air traffic, disseminating traffic alerts and weather advisories, and radar vectoring arriving and departing air traffic. Product Manager for Air Traffic Control plans to acquire 38 systems for installation at Army airfields worldwide.

The **Voice Communications Switching System (VCSS)** is an integrated voice switching system designed for installation at 48 Army sites under the NAS acquisition program.

VCSS is being procured to replace existing analog voice systems that are approaching the end of their economic and technical life cycles. VCSS is designed to provide highly reliable, state-of-the-art air-to-ground, ground-to-ground and intercom communications for controllers of military and civil air traffic. The VCSS is capable of interfacing with legal voice recorders for recording controller-pilot communications. The interface with voice recorders provides a way to chronicle the voice communications into and out of the VCSS for analysis, training, and accident and incident investigation. VCSS has four configurations to accommodate a range of facility sizes.

In addition to the NAS upgrade efforts, the Army **AN/FPN-67 Fixed-Base Precision Approach Radar (FBPAR) System** will provide capabilities for air traffic separation, final approach course monitoring, precision and nonprecision approach guidance, and instrument meteorological conditions recovery operations for aircraft operating in Army-controlled airspace and/or at Army terminal airfields.

The FBPAR will replace the AN/FPN-40 fixed-base radar being used by fixed-base ATC facilities worldwide. This radar is a modification of the precision-approach radar portion of the tactical radar system, ATNAVICS (AN/TPN-31). Once installed, FBPAR will become a permanent component of nontactical Army airfields throughout the world.

For the past several years, U.S. Army, PM ATC has made significant contributions toward the modernization of Army air traffic control systems and air traffic control equipment. Nevertheless, there continues to be a significant amount of aging air traffic services and ATC equipment in the inventory.

MISSILES AND SPACE PROGRAMS

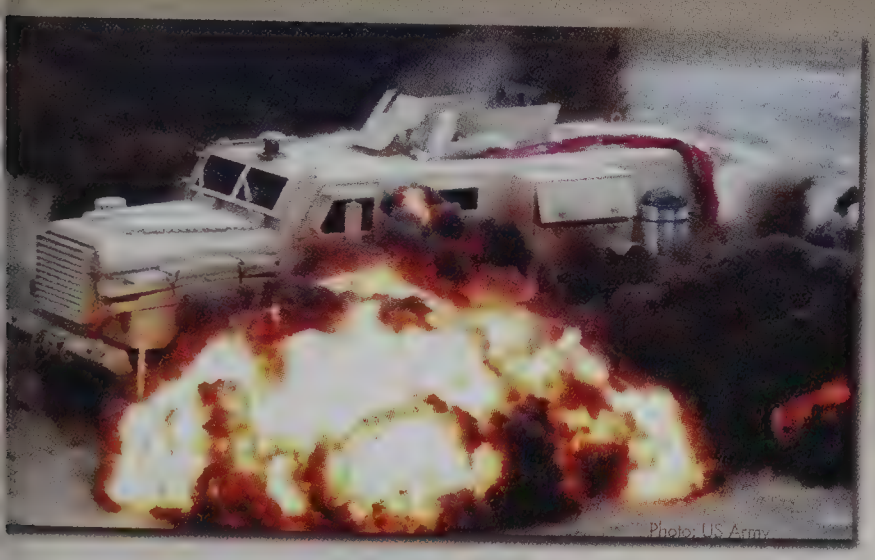
The PEO Missiles and Space provides centralized management for all Army air and missile defense and tactical missile programs as well as selected Army space programs. The PEO is responsible for the full life-cycle management of assigned programs.

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The portfolio of programs assigned to the PEO Missiles and Space spans the full spectrum of the acquisition process from system development to acquisition, testing, production, product improvement, fielding, sustainment and eventual retirement from the force. A number of programs are joint programs being developed with the other services. Two programs within the PEO are international cooperative development programs, with other countries sharing in the development as full partners.

In addition to specific acquisition programs, the PEO is applying a system-of-systems acquisition approach to meet warfighters' needs and obtain the desired capabilities of the Army Air and Missile Defense (AMD) Future Force. This approach requires the systems to be restructured into components of sensors, launchers, missiles, and Battle Management Command, Control, Communications, Computers and Intelligence (BMC^4I), utilizing a standard set of interfaces and networks to communicate. The Army's Integrated Air and Missile Defense (IAMD) acquisition approach will ensure the materiel solutions for the Army's AMD Future Force will provide the capabilities required by the warfighter.

Joint Attack Munition Systems (JAMS)

The Joint Attack Munition Systems (JAMS) Project Office manages all Army aviation rockets and missiles. The current programs include the 2.75-inch Hydra 70 family of rockets, the Hellfire family of missiles and the Joint-Air-to-Ground Missile (JAGM).

The **2.75-inch (70 mm) Hydra 70 Rocket Family** encompasses variants of the free-flight rocket that has become the standard ground-attack rocket. The design includes multiple warheads that can be used on the rocket motor.

Rockets equipped with various fuzes and warhead options include: M261 tactical; M267 practice; M151 (10-pound) antipersonnel or canopy/soft bunker; M229 antipersonnel (17-pound); M274 smoke signature; M257 illumination; M264 smoke; M255A1 flechette; and M278 infrared illuminating.

The **AGM-114 Hellfire Missile Family** includes the Hellfire II and Longbow Hellfire missiles. **Hellfire II** is a precision-strike, semi-active laser (SAL)-guided missile and is the principal air-to-ground weapon for the Army AH-64 Apache, the U.S. Marine Corps AH-1W Super Cobra and the U.S. Air Force Predator unmanned aircraft system (UAS).

The SAL Hellfire II guides using laser energy reflected off the target. It has three warhead variants: a dual warhead, shaped-charge high-explosive antitank (HEAT) for armored threats (AGM-114K); a blast-fragmentation warhead (BFWH) for urban, patrol boat and other "soft" targets (AGM-114M); and a metal augmented charge (MAC) warhead (AGM-114N) for urban structures, bunkers, radar and communications installations, and bridges.

The Longbow Hellfire (AGM-114L) is also a precision-strike missile, but uses millimeter wave (MMW) radar guidance instead of Hellfire II's SAL. It is the principal antitank system for the AH-64D Apache Longbow and uses the same antiarmor warhead as Hellfire II. The MMW seeker provides beyond-line-of-sight fire-and-forget capability as well as the ability to operate in adverse weather and battlefield obscurants.

During Operation Desert Storm, Hellfire earned a reputation for being one of the military's most formidable tank killers. Its multimission capabilities were successfully demonstrated in combat against a wide variety of targets, including radar installations, communications posts, bunkers, buildings, antiaircraft emplacements,

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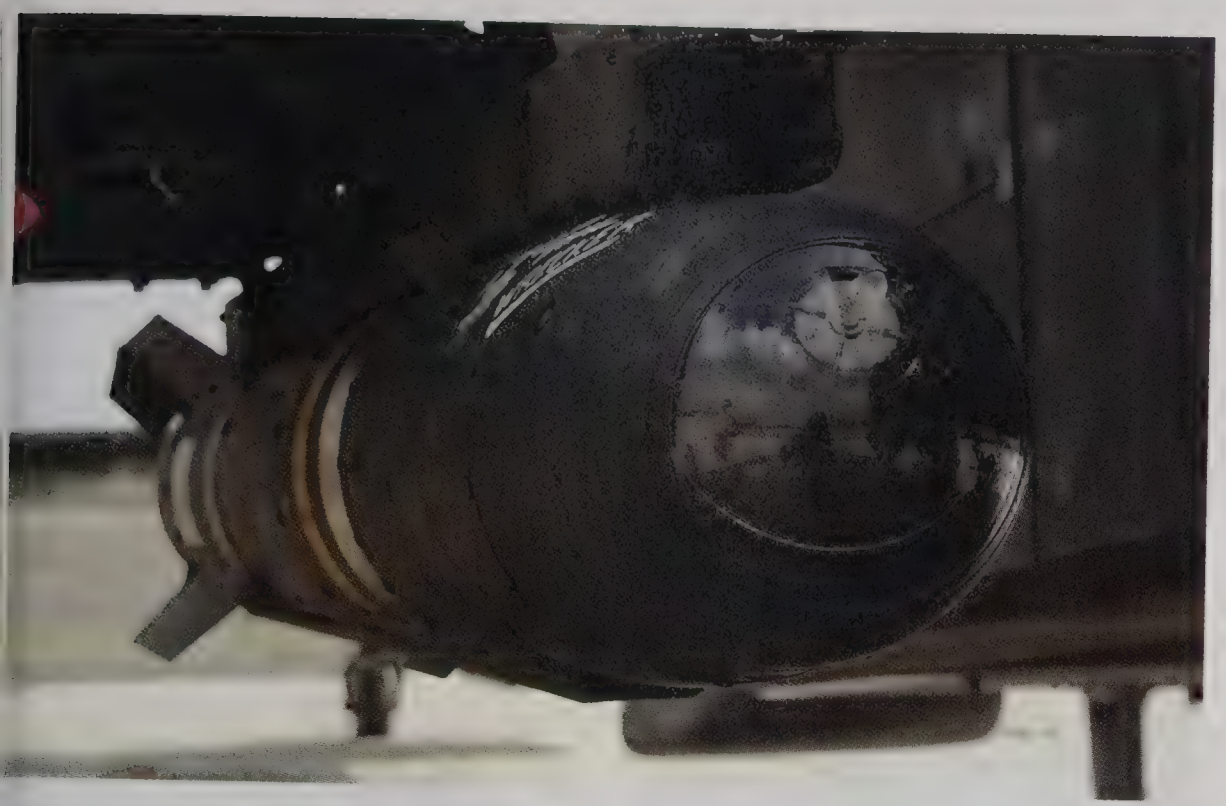
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25–27 October 2010	9–11 October 2017
10–12 October 2011	8–10 October 2018
22–24 October 2012	14–16 October 2019
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13–15 October 2014	11–13 October 2021
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Hellfire missile mounted on an AH-64D Apache Longbow helicopter

oil rigs and bridges. Hellfire missiles are being used extensively in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). The Longbow Hellfire missile was used successfully in combat for the first time during OIF.

The **Joint Air-to-Ground Missile (JAGM)** program will provide a rotary-wing, fixed-wing and unmanned aerial vehicle (UAV)-launched missile system that provides line-of-sight capabilities, including precision point targeting (both active and passive) and fire-and-forget seeker technologies; increased range; and increased lethality against soft and hardened moving and stationary targets. When fielded, the JAGM will replace aviation-launched TOW, the Hellfire family of missiles and the Navy's Maverick family of missiles. The JAGM will increase the warfighter's operational flexibility by effectively engaging a variety of stationary and mobile targets on the battlefield, including advanced heavy/light armored vehicles, bunkers, buildings, patrol craft, command-and-control vehicles, transporter/erector launchers, artillery systems and radar/air defense systems. Its multimode seeker will provide robust capability in adverse weather, day or night, and in an obscured/countermeasure environment, against both stationary and moving targets.

The **Air-to-Air Stinger (ATAS)** is an adaptation of the manportable Stinger system that is designed to engage low-altitude targets.

Cruise Missile Defense Systems (CMDS)

The CMDS Project Office is equipping the transformation of the current force maneuver air and missile defense capability into an integrated air and missile defense capability.

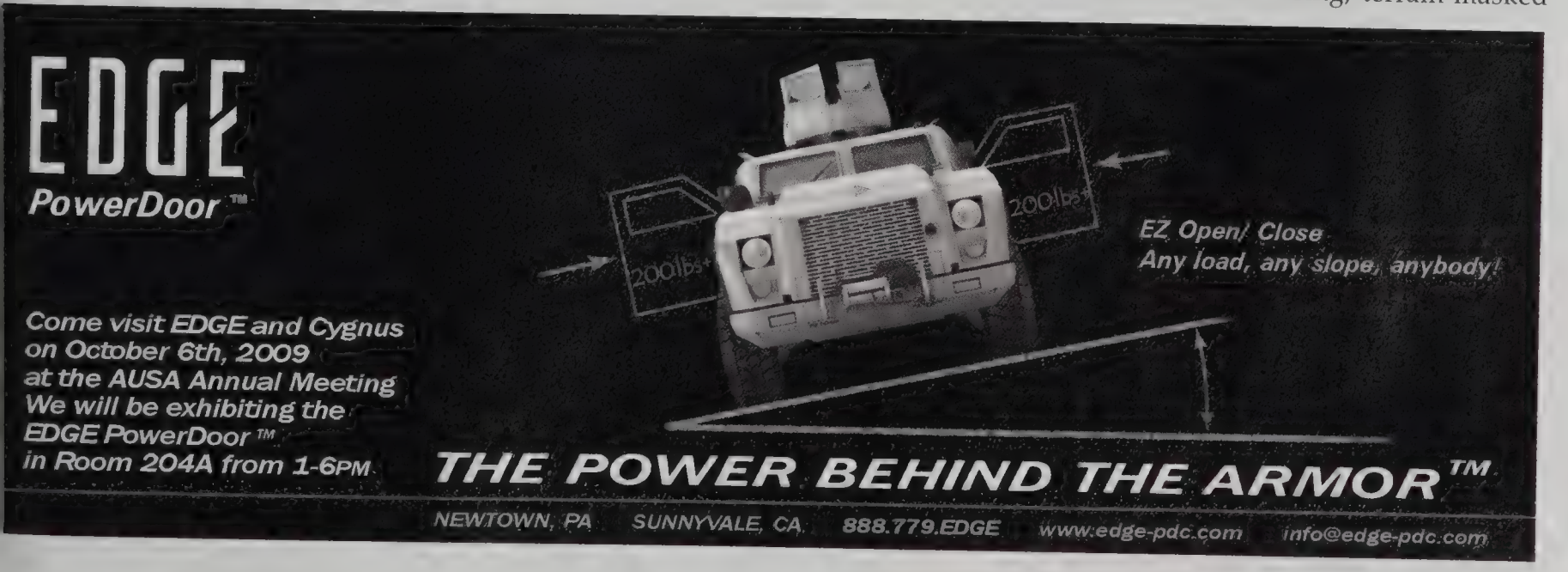
Programs include Stinger-based Avenger and manportable air defense system (MANPADS), surface-launched AMRAAM, the Sentinel radar, Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) and directed energy applications (DEA).

Stinger-based Avenger and **MANPADS** provide high mobility and shoot-on-the-move capabilities through Stinger, a fire-and-forget infrared/ultraviolet (IR/UV) missile system. Stinger is currently the only air defense weapon in the forward area.

Surface-Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM) is a net-centric Block I of enhanced area air defense system (EAADS) extended-range capability in support of the Future Force. Critical initial EAADS Block I capabilities will be achieved with the SLAMRAAM system of systems through the development of a fire unit and Battle Management Command, Control, Communications, Computers and Intelligence (BMC^4I)/integrated fire-control station (IFCS); integration of Sentinel enhanced target range and classification (ETRAC) and joint land attack cruise missile defense elevated network sensor (JLENS); and AMRAAM missile. The SLAMRAAM BMC^4I will be fully integrated and compatible with Army AMD and the Future Combat System (FCS) networks. SLAMRAAM provides a critical overmatch capability against the rapidly evolving cruise missile, unmanned aerial systems, fixed wing and rotary wing.

The **AN/MPQ-64 Sentinel** is an advanced, three dimensional, battlefield X-band air defense phased-array radar with an acquisition range of 40 kilometers. Sentinel transmits its radar imagery to the forward area air defense command and control (FAAD C^2) via radio frequency link. Sentinel is being upgraded to the ETRAC configuration that doubles its range and will integrate with future AMD BMC^4I via SLAMRAAM.

The **Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)** uses advanced sensor and networking technologies to provide 360-degree, wide-area surveillance and precision tracking of land attack cruise missiles. JLENS detects stressing, terrain-masked



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cruise missiles and other air-breathing threats, permitting extended engagement ranges for current air defense systems.

Lower Tier Project Office

The Lower Tier Project Office consists of the Patriot, MEADS, PAC-3 and Joint Tactical Ground Station (JTAGS). The MEADS air defense system, an international program with Germany and Italy, will eventually replace the Patriot with a system that expands the battlespace, is more durable and maneuverable, and provides 360-degree force protection. During MEADS development, key capability improvements will be incorporated into the Patriot systems.

The **Medium Extended Air Defense System (MEADS)** will provide joint lower-tier air defense, missile defense and cruise missile defense for maneuver forces and other critical forward-deployed assets throughout all phases of tactical operations. MEADS will operate in an enclave with upper-tier systems in areas of debarkation and assembly. It will also provide continuous coverage alone or with forward-area air defense systems in the division area of the battlefield during movement to contact and decisive operations.

The system will provide air and missile defense of vital corps and division assets associated with Army and Marine Corps maneuver forces. It will use a combination of netted and distributed architecture with modular configurable battle elements, interoperability with other airborne and ground-based sensors and improved seeker/sensor components to provide a strong 360-degree defense against the full spectrum of tactical ballistic missile, cruise missile, unmanned aerial vehicle and rotary-wing and fixed-wing threats.

MEADS will provide future Army forces with a defense against multiple and simultaneous attacks by short-range ballistic missiles—especially cruise missiles—and other air-breathing threats to the force; immediate deployment for early entry operations with C-130 deployability; mobility to move rapidly and protect maneuver force assets during offensive operations; a distributed architecture and modular components to increase survivability and flexibility of employment in a number of operational configurations; and significantly increased firepower with greatly reduced personnel and logistics requirements.

A tri-national source selection committee, composed of representatives from the United States, Germany and Italy, chose MEADS International of Orlando, Fla., as the prime contractor for this air defense system in May 1999.

The **Patriot Missile System** provides defense of critical assets and maneuver forces belonging to corps and to echelons above corps against aircraft, cruise missiles and


The PAC-3 Missile

tactical ballistic missiles (TBMs). The PAC-2 system upgrade, modified PAC-2 guidance enhancement missiles (GEM) and the PAC-3 missile provide the Patriot missile system with an advanced antitactical missile capability. The combat element of the Patriot missile system is the fire unit, which consists of a phased-array radar set (RS), an engagement control station (ECS), an electric power plant, an antenna mast group, a communications relay group and eight remotely located launching stations (LSs).

The RS provides all tactical functions of airspace surveillance, target detection and tracking, and missile guidance and engagement support. The ECS provides the human interface for command and control of operations. Each LS contains four ready-to-fire missiles sealed in canisters that serve as both shipping containers and launch tubes. The Patriot's fast-reaction capability, high firepower and ability to track numerous targets simultaneously and operate in a severe electronic countermeasures environment are significant improvements over previous air defense systems.

The **Patriot Advanced Capability-3 (PAC-3)** missile program incorporates significant upgrades to the RS and ECS and the battle-proven PAC-3 missile, which uses hit-to-kill technology for greater lethality against tactical ballistic missiles (TBMs) armed with weapons of mass destruction. The PAC-3 missile is the first operationally deployed hit-to-kill weapon

system capable of defeating all known air and missile defense threats. In addition, it is possible to have up to 16 PAC-3 missiles per launcher, thereby increasing firepower and missile defense capabilities. The PAC-3 missile's primary mission is to kill maneuvering and nonmaneuvering TBMs while remaining able to counter advanced cruise missiles and aircraft. The PAC-3 missile upgrade program adds system improvements to increase performance against an evolving threat, meets user needs and enhances joint interoperability.

In April 2003, the Defense Acquisition Board (DAB) convened to review the Army's proposed plan for combined management, development and fielding of the Patriot and MEADS systems within the Army. The DAB approved the Army's plan to evolve the Patriot PAC-2/GEM configuration into an integrated PAC-3/MEADS full capability.

A July 2004 DAB for the Patriot/MEADS combined aggregate program approved entry into system development and demonstration (SDD) with the first unit equipped by fiscal year (FY) 2015.

The **Joint Tactical Ground Station (JTAGS)** is a transportable information processing system that supports combatant commanders and forward-deployed forces with early warning data on ballistic missile launches.



Terminal high altitude area defense (THAAD) test

The Missile Defense Agency-managed **Terminal High Altitude Area Defense (THAAD)** system, a critical element of the ballistic missile defense system (BMDS), will provide rapidly deployable ground-based missile defense components that deepen, extend and complement the BMDS to any combatant commander to defeat ballistic missiles of all types and ranges while in all phases of flight.

THAAD's combination of high-altitude, long-range capability and hit-to-kill lethality enables it to negate the effects of weapons of mass destruction at intercept ranges well beyond the defended area. These attributes, along with THAAD's unique endo- and exo-atmospheric capability, enlarge the battlespace to allow multiple intercept opportunities in both the late-midcourse and terminal phases of ballistic missile trajectories. THAAD can accept cues from Aegis, satellites and other external sensors to further extend the battlespace and defended area coverage. THAAD will operate in concert with the lower-tier Patriot/PAC-3 missile system to provide increased levels of effectiveness.

THAAD is a rapid-response weapon system that can be deployed quickly to protect critical assets worldwide. The THAAD element consists of five major components: missiles; launchers; radars; command, control, battle management and communications (C^2BMC); and THAAD-specific support equipment. All components have been successfully integrated, tested and demonstrated during the first program phase that concluded in 2000.

The THAAD development program





Tube-launched, optically tracked, wire-guided (TOW) missile launch

flight testing resumed in 2005 with the first 15 flight tests. In May 2006, Lockheed Martin and the U.S. Missile Defense Agency successfully conducted the first developmental flight test to engage the entire THAAD weapon system, including THAAD interceptor, launcher, radar and fire-control system. Following repeated flight test successes, the U.S. Army "stood up" the first of four planned THAAD firing batteries at Fort Bliss, Texas, in mid-2008.

Close Combat Weapon Systems (CCWS)

The Close Combat Weapon Systems (CCWS) Project Office manages a range of antiarmor missile and target acquisition systems. Current programs include tube-launched, optically tracked, wire-guided (TOW 2)/TOW 2A/TOW 2B, Javelin, improved target acquisition system (ITAS) and improved Bradley acquisition system (IBAS). The office is also coordinating preliminary work on future TOW missile improvements.

The **BGM-71 Tube-launched, Optically Tracked, Wire-guided (TOW) Missile System**, with the multimission TOW 2A, TOW 2B, TOW 2B Aero and TOW bunker buster missile, is a long-range, multimission, precision-attack weapon system used throughout the world today. TOW is in service in more than 40 international armed forces and integrated on more than 15,000 ground, vehicle and helicopter platforms worldwide. TOW is also the preferred heavy assault weapon system for NATO, Coalition, United Nations and peacekeeping operations worldwide. The TOW 2A, TOW 2B, TOW 2B Aero and TOW bunker buster missiles can be fired from all TOW launchers, including the improved target acquisition systems (ITAS), Stryker antitank guided missile (ATGM) vehicle (modified ITAS), and Bradley fighting vehicles (improved Bradley acquisition subsystem).

The Improved Target Acquisition System (ITAS) includes a second-generation FLIR that uses standard advanced dewar assembly (SADA II) technology, an eyesafe laser rangefinder. The TOW ITAS provides a highly mobile, adverse weather, day-or-night capability needed by early entry forces to destroy advanced threat armor at greater standoff ranges in the main battle area. The ITAS features an automatic boresighting capability, aided target tracking, embedded training, BIT/BITE and traversing unit modifications. These features ensure crew survivability through increased standoff range and improved performance in the battlefield environment.

The TOW weapon system, with its extended-range performance, is the long-range precision heavy antitank/assault missile of choice for the U.S. Army Stryker, Bradley, ITAS-Humvee platforms and the U.S. Marine Corps Humvee, light armored vehicle and AH-1W Cobra platforms. In addition, it can be operated in a dismounted ground mode.

The TOW weapon system entered its production and deployment phase in 1970. Since then, multiple variations of the missile and launcher systems have been fielded.

Recent developments include the development of the bunker buster missile for use by the Stryker brigade combat teams and the introduction of the TOW 2B Aero, an extended-range (4.5-kilometer) version of the TOW 2B missile. Future improvements will include replacing the wire guidance system with a wireless radio frequency (RF) guidance system.

The **Javelin** is a shoulder-launched, fire-and-forget, manportable, antiarmor and assault weapon system optimized for attacking and destroying armored tank targets, buildings, bunkers and hovering helicopters. It replaces the Dragon antiarmor missile system, providing a medium-range multipurpose capability for infantry, scouts and combat engineers. The system is lethal against tanks with conventional and reactive armor and against a variety of other targets.

Javelin has been used very successfully in Iraq to defeat armored targets, bunkers and hard-to-reach targets in urban terrain, without endangering friendly forces or noncombatants.

Javelin has two major tactical components: a reusable command launch unit (CLU) and a missile sealed in a disposable launch tube assembly.

The CLU is a compact, lightweight target-acquisition device incorporating an integrated day/second-generation thermal sight, launch controls and a gunner's eyepiece display. It provides target engagement capability in adverse weather and countermeasure environments. The CLU may also be used in the stand-alone mode for battlefield surveillance and target detection; this has proven effective both in Afghanistan and Iraq.

The missile is 127 millimeters in diameter with a staring, imaging infrared seeker; a feature-based tracker; a lethal warhead; dual in-line eject; a solid-propellant flight motor; gunner-selected direct-attack or top-attack engagement guidance options; and the Javelin launch tube assembly, an expendable handling launch tube to house the missile, power pack attachment and CLU interface. The complete round is described as "wooden," as it requires no pre-use testing or maintenance. Its shelf life is 10 years.

The Javelin system weighs 49 pounds, and its maximum range is more than 2,500 meters (minimum operational range is 65 meters). Javelin's key technical feature is the use of fire-and-forget technology that allows the gunner to fire and immediately take cover. Additional special features are the top-attack and direct-fire modes (for targets under cover), advanced tandem warhead, imaging infrared seeker, target lock-on before launch and soft launch. Soft launch allows Javelin to be fired safely from enclosures and covered fighting positions, increasing gunner survivability. The time required to prepare Javelin for firing is less than 30 seconds, with a reload time of less than 20 seconds.

Precision Fires Rocket and Missile Systems

The Precision Fires Rocket and Missile Systems (PFRMS) Project Office manages



Multiple launch rocket system (MLRS)

the multiple launch rocket system (MLRS) family of launchers, including the M270, M270A1 and high-mobility artillery rocket system (HIMARS) as well as the entire suite of rockets and missiles for those launchers. The MLRS family of munitions (MFOM) includes the basic, extended-range and guided MLRS rockets as well as the Block I/IA and unitary Army tactical missile system (ATACMS).

The **M270 Multiple Launch Rocket System (MLRS)** is a highly mobile, automated system that fires surface-to-surface rockets and missiles from a tracked platform derived from the same chassis used by the Bradley fighting vehicle. The MLRS delivers large volumes of firepower in a short time against critical, time-sensitive targets. From inside the cab, the crew of three can fire up to 12 MLRS rockets. The basic rocket warhead carries dual-purpose, improved conventional munition (DPICM) submunitions. MLRS, however, is capable of supporting and delivering all of the MLRS family of munitions (MFOM), including the Army tactical missile system (ATACMS) variants.

The **M270A1 MLRS Launcher** appears identical to existing M270s while incorporating an improved fire-control system (IFCS) and an improved launcher mechanical system (ILMS).

The IFCS allows for more sophisticated munitions and reduces operating costs, while the ILMS dramatically reduces the time needed to aim and reload the launcher.

The **M142 High Mobility Artillery Rocket System (HIMARS) Launcher** is the newest launcher variant of the MLRS family.

HIMARS is a highly mobile artillery rocket system offering MLRS firepower on a wheeled chassis and is C-130 transportable.

HIMARS carries a single six-pack of MLRS rockets, or one Army tactical missile system (ATACMS) missile, on the Army's

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M142 high mobility artillery rocket system launcher (HIMARS)



new family of medium tactical vehicles (FMTV) 5-ton truck. HIMARS is designed to launch the entire MLRS family of munitions. A platoon of HIMARS advanced concept technology demonstration prototypes were successfully used during OIF, exclusively firing ATACMS missiles in support of ground forces.

The system has proven to be highly effective and reliable during combat operations associated with Operation Iraqi Freedom.

The **ATACMS Blocks I and IA Missiles** provide long-range, surface-to-surface fire support for Army corps and division operations. Both ATACMS Blocks I and IA are surface-to-surface guided missile systems with antipersonnel/antimateriel (APAM) warheads.

The ATACMS with an APAM warhead attacks soft-area targets at ranges well beyond the capability of existing cannons and rockets. Targets include surface-to-surface missile and multiple rocket launcher units; air defense systems; logistics elements; and command, control and communications complexes.

The ATACMS Block IA, with enhanced accuracy enabled by GPS augmentation to its inertial guidance capability, has a 300-kilometer reach.

Block IA began fielding in FY 1998, and retrofit of selected launchers to Block IA capability occurred simultaneously with missile fielding. Fired from M270A1 and HIMARS launchers, it has proven to be highly effective in OIF.

The **ATACMS Unitary Missile** is a U.S. Army requirement developed from lessons learned in Kosovo. It was clear that battlefield commanders needed a weapon with precise guidance and lower lethal radii to minimize collateral damage.

The **Army TACMS Quick-Reaction Unitary (QRU) Missile** is a responsive all-weather, long-range missile with a high-explosive, single-burst warhead fired from the multiple-launch rocket system family of launchers.

The Army TACMS QRU is converted to the unitary configuration by replacing the antipersonnel/antimateriel (APAM) submunitions in Block IA missiles and integrating a proven government-furnished unitary warhead (470-pound SLAM/HARPOON) and fuse into the warhead section.

The missile has a range of 270 kilometers and provides the Army the interim capability to attack high-payoff, time-sensitive targets without placing combat or support aircraft and crews at risk.

Its precision accuracy, the absence of potential submunition duds and reduced lethal radii overcome collateral damage concerns.

The Army TACMS QRU was used in OIF and was highly effective in destroying high-payoff targets at the outset of the operation.

The **Extended-Range Multiple Launch Rocket System (ER-MLRS)**, which extends the 31.8-kilometer range of the basic rocket to approximately 45 kilometers, provides longer-range rocket capability. The program emerged from lessons learned during Operation Desert Storm, in which senior-level commanders, while applauding the effectiveness of the basic rocket, stated a requirement for greater range. The ER-MLRS is a free-flight, area-fire artillery rocket designed to enhance the capabilities of the MLRS.



Guided multiple launch rocket system unitary

The **Guided Multiple Launch Rocket System (GMLRS)** supports Army transformation with increased overmatch capabilities and a reduced logistics footprint over current free-flight rockets. GMLRS is used with the M270A1 and the HIMARS launchers.

The rockets incorporate GPS-aided inertial navigation systems.

A second GMLRS variant is the **GMLRS Unitary.** GMLRS unitary integrates a 200-pound class unitary warhead into the GMLRS. Like its predecessor, its range exceeds 60 kilometers. This munition is used when terrain conditions and/or rules of engagement would otherwise preclude using the DPICM variant. Its multimode warhead fuze (impact, delay and airburst) greatly enhances its employment options against many types of targets in various combat environments.

The GMLRS unitary has proven its effectiveness in OIF and has become the indirect-fire weapon of choice in urban areas.

Integrated Air and Missile Defense (IAMD)

In addition to the efforts of its "weapon system" project offices, PEO Missiles and Space is applying a system-of-systems acquisition approach to meet warfighter requirements and obtain the desired capabilities of the Army Air and Missile Defense Future Force. This approach calls for a restructuring of systems into components of sensors, weapons and Battle Management C^4I with a standard set of interfaces among the components, using a standard set of networks for communication. The Army's Integrated Air and Missile Defense (IAMD) acquisition approach significantly affects the PEO strategy for materiel development and systems acquisition.

COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INTELLIGENCE (C^4I) SYSTEMS

U.S. Army C^4I programs and activities are the foundation for tactical digitization and service operations in the 21st century. The Army organizations with responsibilities to acquire, develop and sustain C^4I systems include the U.S. Army Communications-Electronics Command, the Communications-Electronics Research, Development and Engineering Center and the following program executive offices (PEOs): PEO Command, Control and Communications-Tactical; PEO Intelligence, Electronic Warfare and Sensors; and PEO Enterprise Information Systems.

These organizations provide and sustain advanced digital and electronic systems that support various mission areas in the tactical environment, including digital battle command, platforms and hardware support, C^4 support to air and missile defense, C^4 support to network operations, C^4 support to intelligence operations, C^4 support to fires and effects, sensors and sensor systems, current force unattended sensors, night-vision sensors, radios and communications systems.

Digital Battle Command

Project Manager (PM) Battle Command produces, deploys and sustains current and future Army battle command system (ABCS) software.

PM Battle Command provides integrated command-and-control (C^2) software, training and support to the joint land component warfighter.

Fire-support command and control includes advanced field artillery tactical data system (AFATDS), Centaur, fire-support terminal unit (FSTU), forward entry device (FED), gun display unit replacement (GDU-), joint automated deep operations coordination system (JADOCS), lightweight forward entry device (LFED) and pocket-sized forward entry device (PFED).

Battle command sustainment support system (BCS^3) fuses sustainment information from multiple sources into a single mission-focused and tailored, map-centric visual display.

Strategic battle command is the Army battle command system component that provides Army, joint and coalition commanders with readiness reporting, force projection and situational awareness through the Global Command and Control System-Army (GCCS-A) and the Defense Readiness Reporting System-Army (DRRS-A). It is the Army's component program office for Net-Enabled Command Capability (NECC).

Tactical battle command combines multiple complex capabilities into an integrated tool set, allowing warfighters to visualize the battlespace and synchronize the elements of combat power while simultaneously collaborating and sharing data in near-real time. Maneuver Control System 6.4 provides maneuver functional and battle staff tools to commanders and staffs from battalion to Army service component command (ASCC). The command post of the future (CPOF) serves as a decision support system, providing real-time situational awareness and collaborative tools for tactical decision making, planning, rehearsal and execution management for commanders and staffs from battalion to ASCC. Battle command common services (BCCS) provides the tactical server/service infrastructure in support of network-enabled systems from battalion to ASCC.

Battle command also includes theater effect-based operations advanced concept technology demonstration (ACTD) and common software.

Battle command delivers high-quality capability, enhances warfighter performance and reduces system complexity.

Battle command rapidly adapts and fields capabilities in a dynamic environment. In designing hardware and software strategies to best support tactical, operational and strategic applications, battle command uses cutting-edge capabilities and adapts technology for the current wartime environment.

Information is a significant source of combat power. Battle command is leading change and integrating current capabilities into future innovations.

Platforms and Hardware Support

The **Standardized Integrated Command Post System (SICPS)** provides modular, interoperable and fully integrated, campaign-quality command post platforms and the C^4I physical infrastructure, with joint capabilities, to commanders and staffs—from brigade combat teams to divisions and corps. SICPS consists of various systems, specifically the SICPS command post platform (CPP), which includes the command post local area network (CP LAN) and command post communications system (CPCS); the command center system (CCS); and the trailer-mounted support system (TMSS).

The **Army Airborne Command and Control System (A^2C^2S)** provides the maneuver commander and his staff with a highly mobile, self-contained and reliable airborne digital command post. This highly mobile system allows the commanders of the units of employment and units of action to maintain situational awareness and exercise command and control, either from a temporary remote site or while on the move through the battlespace.

The **Mounted Battle Command on the Move (MBCOTM)** provides maneuver commanders and staffs with a highly mobile, self-contained and reliable combat vehicle-based digital command post, which provides maneuver commanders situational awareness and a common operational picture, which allows commanders to maintain situational understanding while on the move and physically separated from a fixed command post.

C^4 Support to Air and Missile Defense

Another representative Army battle command system (ABCS) component is the **Air and Missile Defense Workstation (AMDWS)**, the air and missile defense component of the ABCS. AMDWS serves as a battlespace awareness information management system that contributes to combat effectiveness by retrieving, fusing and distributing time-sensitive information necessary to achieve decision-cycle dominance.

The **Forward Area Air Defense Command and Control (FAAD C^2)** is the engagement operations piece of the AMD-



The Army airborne command and control system (A^2C^2S)

CCS. FAAD C² collects, stores, digitally processes, displays and disseminates real-time tactical cueing and tracking information, the common tactical air picture, and command, control and intelligence information to all short-range air defense weapons.

The **Air and Missile Defense Planning and Control System (AMDPCS)** is the hardware component of the Army's air and missile C² system. It consists of an assemblage of modular and reconfigurable shelters, unique air and missile defense hardware/software, standardized automated data processing equipment and communications suites.

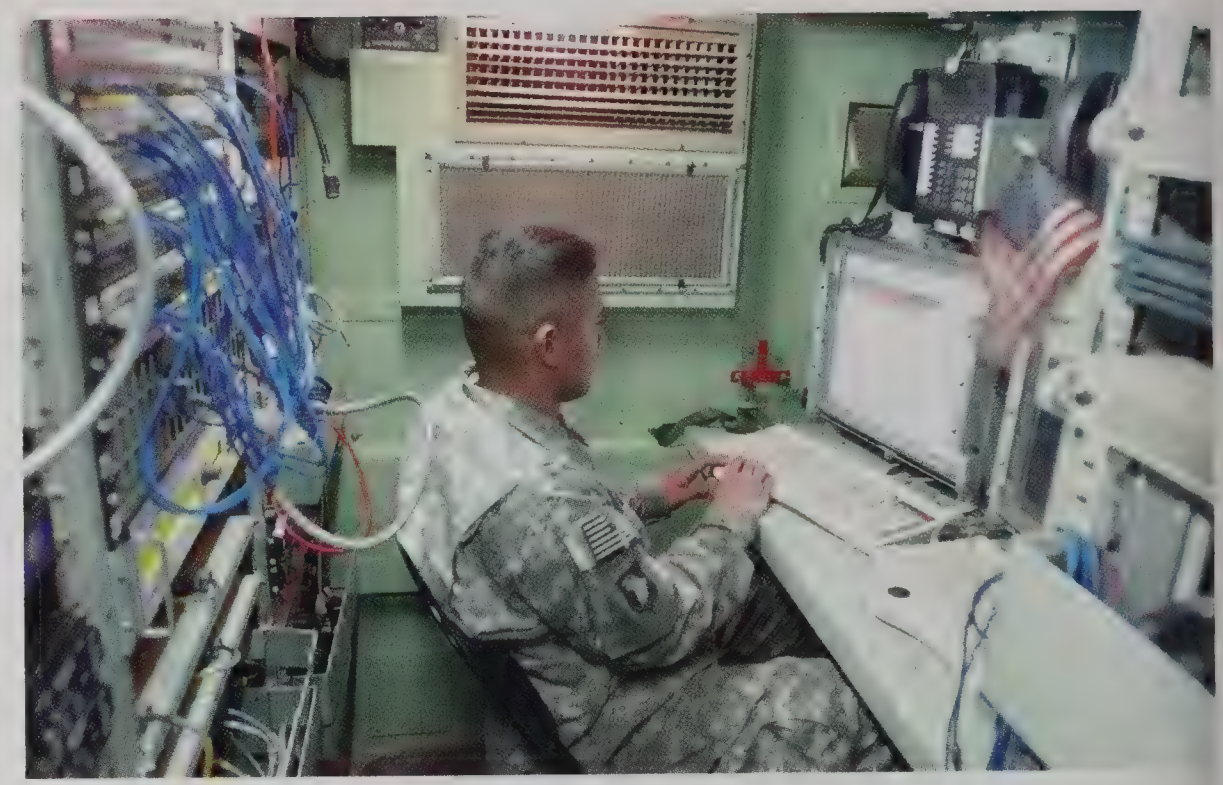
C⁴ Support to Network Operations

The **Joint Network Management System (JNMS)** is a software system consisting of modules for planning and engineering, monitoring, control and reconfiguration, spectrum management and security (information assurance/communication security). It provides the commanders, combatant commands, joint task forces and service component headquarters a common, automated planning and management tool that will plan, monitor and control the joint communications and data backbone associated with a joint task force/joint special operations task force.

The **Integrated System Control (ISYSCON) V(1), V(2), V(4)** provides the signal commander and staff with a centralized automated planning and control capability to assist in managing tactical communication systems in support of combat forces, weapons systems and battlefield automated systems. It functions as the battlefield signal command-and-control management system at division through theater echelons or in support of independent task force operations. The **ISYSCON V(4)** is the S6's tool to provide network management to the local area network (LAN) at division, brigade and battalion tactical operation centers (TOCs) and command posts (CPs). The ISYSCON V(4) gives the signal soldier the capability to manage the Tactical Internet (TI), perform Force XXI Battle Command Brigade and Below (FBCB²) network and security administration functions, and monitor the enhanced position location reporting system (EPLRS) network.

Information Dissemination Management-Tactical (IDM-T) is a suite of tools that enables tactical users to distribute mission-critical information to commanders, allowing them to streamline the decision-making process on the battlefield.

Joint network node (JNN)



Joint Network Node (JNN) network commercial technology insertion will provide the Army with a high-speed and high-capacity backbone communications network focused on rapidly moving information in a manner that supports commanders, staffs, functional units and capabilities-based formations. JNN is now WIN-T Increment 1, a joint compatible communications package that allows the warfighter to use advanced networking capabilities, retain interoperability with current force systems, and keep in step with future increments of WIN-T. It is a rapidly deployable, early entry system housed in an S-250 shelter and mounted on a Humvee expanded capacity vehicle.

C⁴ Support to Intelligence Operations

The **Common Ground Station (CGS)** is a rapidly deployable and mobile tactical data processing and evaluation center that integrates imagery and signals intelligence, surveillance and reconnaissance data products into a single visual presentation of the battlefield, providing commanders with near-real-time situational awareness and enhanced battle management and targeting capabilities. CGS links multiple air and ground sensors, including the Joint Surveillance/Target Attack Radar System (JSTARS) aircraft, to the Army battle command system at various nodes, such as echelons above corps, corps, division and brigade. JSTARS is a multiservice battle management and targeting system with an airborne multimodal radar incorporating an electronically scanned antenna. The radar combines moving-target indicator (MTI) and fixed-target indicator and synthetic aperture radar (SAR) functions and is carried aboard an E-8 (militarized Boeing 707) aircraft. Radar data are broadcast to the Army CGS through an omnidirectional data link and over ultrahigh frequency (UHF) satellite communications, which can also be received from other air platforms, such as unmanned aerial vehicles (UAVs). In addition to being the Army's premier radar MTI ground station, CGS has evolved into a multisensor ground station that receives, processes and displays sensor data from the Predator UAV, tactical UAV (TUAV), airborne reconnaissance low, U-2, Guardrail Common Sensor and the integrated broadcast service, while maintaining a small footprint. CGS capabilities are being channeled into a distributed common ground system-A (DCGS-A) through preplanned product improvements, which will be disseminated in a network-centric environment. CGS, with its JSTARS and other sensor feeds, fulfills an urgent Air-Land battlefield requirement by providing an Army/Air Force sensor and attack control capability designed to locate, track, classify and assist in attacking moving and stationary targets beyond the forward line of troops. CGS is the only wide-area surveillance system that has the resolution and real-time capability to provide the commander with the data necessary to be effective in the future sensor-oriented battle management process.

The **All-Source Analysis System (ASAS)** provides combat leaders with the fused intelligence needed to view the battlefield and more effectively conduct the land battle from battalion to echelons above corps.

ASAS encompasses a family of systems that includes the compartmented all-source workstation in the analysis control element (ACE) found at division, corps and echelons above corps (EAC); the collateral laptop configuration called ASAS-Light, issued down to the battalion level; the Humvee-mounted intelligence fusion station (IFS) with integrated communications called the analysis control team-enclave (ACT-E), which is found at brigade level; and the communications control set (CCS) found at division, corps and EAC.

C⁴ Support to Fires and Effects

The **Advanced Field Artillery Tactical Data System (AFATDS)** provides automated fire-support command, control and communications for the Army, Navy and Marine Corps including target-weapon pairing for optimum use of fire-support assets and automated planning, coordination and control of all fire-support assets. AFATDS performs the attack analysis necessary to determine the optimal weapon-target pairing to provide maximum use of the fire-support assets (field artillery, mortars, close air support, naval gunfire, attack helicopters and offensive electronic warfare). AFATDS automatically implements detailed commander's guidance in the automation of operational planning, movement control, targeting, target value analysis and fire-support planning.

A critical capability for the warfighter is a battlefield radar that can detect, classify and locate enemy mortar, artillery, rocket and missile systems within seconds of their firing, allowing immediate responses. The Firefinder family (AN/TPQ-36 and AN/TPQ-37) are mortar and artillery locating systems that, with the Lightweight Countermortar Radars (AN/TPQ-48(V)2), have been used extensively in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) with great success and are credited with forcing the enemy to radically change its tactics.

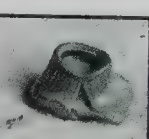
The **AN/TPQ-36(V)8 Firefinder** is a lightweight, small, highly mobile, phased array radar that automatically locates hostile mortar, short-range launched rockets and other high-trajectory weapons. The radar has the capability of locating weapons firing simultaneously from different locations. The radar can automatically detect, verify and track projectiles in flight launched at any angle within selected 90-degree azimuth sectors over 360 degrees of coverage and extrapolate to both the firing positions and the impact points. Once a projectile is detected, the weapon location is computed and used to direct counterbattery fires. The AN/TPQ-36(V)8 will shortly undergo a modification work order (MWO) to replace the existing Northrop Grumman Corporation radar processor (RP) with the new Thales Raytheon Systems RP in the AN/TPQ-36 (V)8 Radar Set. Once the MWO is complete, the nomenclature will become AN/TPQ-36(V)10 Radar Set. The MWO also includes an upgrade to the ethernet switch to increase the data transfer capacity to 1 GB, which greatly improves system operability for the user by increasing the probability of target location, increasing location accuracy in a benign and clutter environment, and addressing parts obsolescence.

The **AN/TPQ-37(V)8 Firefinder** is a mobile, phased-array, artillery-locating radar system. It is larger than the AN/TPQ-36, and its target acquisition range is greater. The system uses a combination of radar techniques and computer-controlled functions to detect and accurately locate enemy artillery and rocket weapons to permit rapid engagement with counterfire. The AN/TPQ-37(V)8 consists of an operations control group mounted on an M-3S-series truck and the MEP-lISA 60-kilowatt, 400-hertz generator set mounted on a 5-ton truck. This truck also tows the antenna transceiver group consisting of the phased-array antenna, transmitter, receiver and associated electronics mounted on the M-I048 trailer, a 6-ton four-wheel flatbed cargo trailer. The AN/TPQ-37(V)8 upgrade program incorporates mechanical enhancements to improve reliability, availability and maintainability. It improves transportability, mobility, survivability and commonality with the AN/TPQ-36. Software improvements include reduced false locations and incorporation of a long-range mode. Special features include a new, improved cooler, C-130 transportability kit, MAPS self-survey and a separate tape for long-range missile detection software. The system is designed to be strategically deployable and operable at all levels of conflict.

The AN/TPQ-36 and AN/TPQ37 are assigned to the target acquisition battery of each division. Both the AN/TPQ-36 and AN/TPQ-37 Firefinder radars continue to be a success in OIF and OEF. They were lauded for their ability to acquire enemy mortars and artillery, allowing quick and effective counterbattery fire.

The **AN/TPQ-48 Lightweight Counter-Mortar Radar (LCMR)** fills a critical gap in the protection of ground-based forces. It addresses indirect fire threats, automatically locating mortar weapons in a 360-degree area of cover. The system can rapidly detect, track and locate mortar rounds at ranges out to the effective range of most mortar weapons, which allows the enemy to be neutralized through combat air support or counterfire. These systems have been deployed with Army Special Forces, conventional Army and Marine units and as part of the counterrocket, artillery and mortars (C-RAM) system of systems in Iraq and Afghanistan. The LCMR detects and locates mortar positions automatically over 360 degrees by detecting and tracking the mortar shell and then backtracking to the weapon position. When a mortar is detected, the LCMR sends a warning message indicating a round is incoming. After sufficient data is collected to enable an accurate weapon location, the weapons location is transmitted. LCMR successfully demonstrates the concept of a light-weight, manportable radar weighing approximately 120 pounds, transportable by a

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crew of two, and is digitally connected to fire-support and command-and-control networks. Its lightweight modular design speeds employment and displacement, providing the warfighter with enhanced target location accuracy and projectile classification capability. The radar can be battery powered and requires less than 300 watts of prime power. It can also run off of vehicle power and is shipped with an AC adapter to allow use of generator or commercial power. The LCMR mitigates close-combat radar coverage gaps and complements the current AN/TPQ-36 and -37 Firefinder radars, fully supporting modular and fires brigade operations. The LCMR program is continuing through a developmental effort for the LCMR AN/TPQ-48(V)3 system and will provide improved operational and physical functionality over the existing LCMR radar systems. The (V)3 LCMR will have increased accuracy and range, maintain its high mobility and two-man transportability, have improved emplacement capabilities and be ruggedized for today's battlefield. An additional developmental effort for the LCMR system has been initiated to mitigate the stress of continuous deployment and also to insert technology developed under other LCMR programs. Upgrades include: increasing system accuracy, providing hardware improvements of the single board computer, automatic survey and alignment, tripod and gain stage adjustments. Also included is a redesign of the transport cases, the addition of a fiber-optic interface and software improvements.

The **Enhanced AN/TPQ-36 Radar (EQ-36)** is the next-generation counterfire radar for the U.S. Army. It encompasses the latest in radar technology and processing, providing the latest edge in protecting warfighters. The EQ-36 will represent a significant upgrade from the currently fielded Firefinder radars' 90-degree capability, adding a 360-degree continuous coverage capability to its arsenal to fill a paramount need of the warfighter in theater. In addition, EQ-36 will offer greater mobility, flexibility, ease of use, range and supportability. EQ-36 will provide the necessary situational awareness and targeting capability tomorrow's commander requires to combat an adaptive enemy threat operating in an asymmetric environment. The EQ-36 represents a vast improvement in both range and accuracy over existing counterfire radars. It has shown the ability to operate through extreme clutter and features a probability-of-location rate that performed with a higher accuracy level.

The **AN/TMQ-41** and **AN/TMQ-41A Meteorological Measuring Set (MMS)** is an upper air meteorological system that uses state-of-the-art technology to make vertical profiles of the Earth's atmosphere. The MMS sounds the atmosphere with a balloon-borne radiosonde, which measures the meteorological (MET) parameters of temperature, pressure, relative humidity, wind speed and wind direction. This information is processed by the MMS computer and is available in STANAG, WMO and FATDS formats. Typical users include: Field Artillery, Corps of Engineers, Chemical Corps, target acquisition elements, NATO and USAF weather forecasters. Messages may be disseminated by radio (voice or digital), landline (telephone or teletype), or hand-delivered, hard-copy printouts.

The MMS has the flexibility to operate anywhere in the world and allows the user to select the mode of operation most suitable for his situation. Multiple methods of determining winds are available through the use of radio direction-finding (RDF) techniques or navigational aids (NAVAID), such as LORAN or GPS.

The **AN/TMQ-52 A/B Meteorological Measure Set-Profiler (MMS-P)** is a replacement for the AN/TMQ-41 Meteorological Measuring Set. Profiler uses a suite of meteorological sensors and MET data from Air Force weather satellites along with an advanced weather model to provide highly accurate MET data at much greater ranges than MMS. The MMS-P provides accurate temperature, atmospheric pressure, relative humidity, wind direction and speed, and other MET data to determine necessary adjustments to standard firing data to increase indirect fire system accuracy.

Profiler uses this information to build a four-dimensional MET model (height, width, depth and time) that includes terrain effects.

By providing accurate MET messages, Profiler enables the artillery to have a greater probability of first-round hit with indirect fire. This capability increases the lethality of all field artillery platforms such as the multiple launch rocket system (MLRS) and self-propelled or towed howitzers. In addition, the increased accuracy attributed to Profiler MET data reduces the risk of friendly-fire fratricide.

The **Initial Fire-Support Automated System (IFSAS)** is an automated fire-support command-and-control system located at the corps fire-support element, division artillery fire-support element, field artillery brigade fire-support element and field artillery battalion echelons. IFSAS provides the commander with an automated command-and-control decision-making capability for using cannon, rocket and missile delivery systems.

The **Battery Computer System (BCS)** is an automated fire-support command-and-control system located at field artillery battery echelons. BCS provides the commander with an automated command-and-control decision-making capability for using cannon delivery systems. BCS performs automated fire missions, fire planning, fire unit status, ammunition accounting, and meteorological and geometry processing in support of the field artillery missions.

Sensors and Sensor Systems

The **Guardrail Common Sensor (GRCS)** system is the Army's corps-level airborne signal intelligence (SIGINT) collection, location and dissemination system providing tactical commanders near-real-time targeting information. There are currently four GRCS systems fielded worldwide, providing support to U.S. Forces Korea, U.S. Army Europe and supporting Operations Enduring Freedom and Iraqi Freedom. The GRCS systems consist of seven to 12 aircraft, depending on the system, that normally fly operational missions in sets of two or three aircraft providing near-real-time SIGINT and targeting to tactical commanders with emphasis on deep battle and follow-on forces attack support.

Key features include integrated communications intelligence (COMINT) and elec-



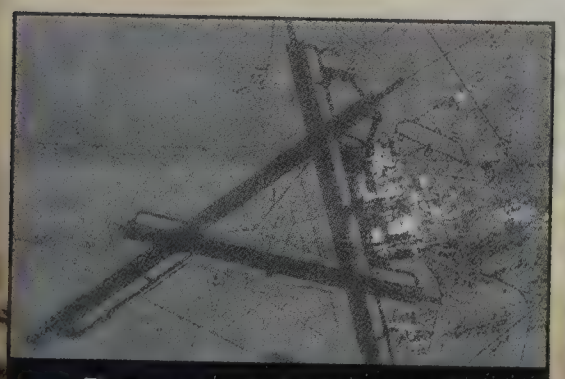
The Enhanced AN/TPQ-36 (EQ-36) radar system

COMBAT PROVEN.
Lynx SAR/GMTI

General Atomics Aeronautical Systems, Inc. (GA-ASI), is the industry leader in providing persistent intelligence, surveillance, and reconnaissance (ISR) on both manned and unmanned aircraft. With over 20,000 combat flight hours, our Lynx Synthetic Aperture Radar (SAR)/Ground Moving Target Indicator (GMTI) is the only SAR/GMTI system currently deployed in combat on unmanned aircraft. Combined with electro-optical/infrared (EO/IR) streaming day and night video and CLAW payload management and control software, no other system has the precision capability to detect, identify, and track time-sensitive targets.

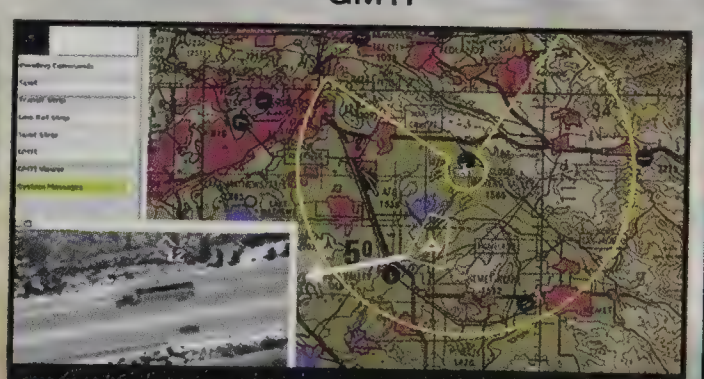
Lynx SAR/GMTI is the radar of choice for tactical reconnaissance missions – operational today, and provides the all-weather situational awareness required in today's combat environment.

SAR



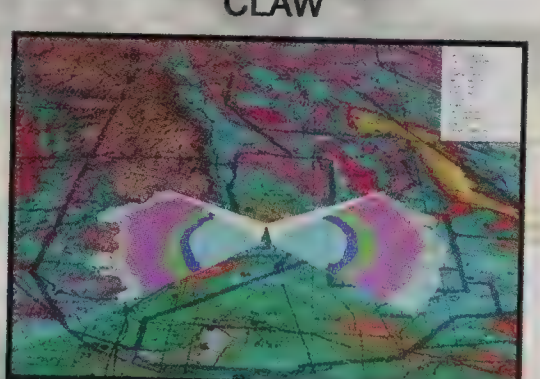
Broad Area Surveillance

GMTI



Real-time Vehicle Detection

CLAW



Situational Awareness

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Prophet systems

tronic intelligence (ELINT) reporting, enhanced signal classification and recognition, near-real-time direction finding, precision emitter location and an advanced integrated cockpit. Primary capabilities include integrated signals exploitation, enhanced signal classification and recognition, fast direction finding, precision emitter location and advanced integrated avionics. Interoperable data links provide microwave connectivity between the aircraft and the Guardrail Ground Baseline (GGB).

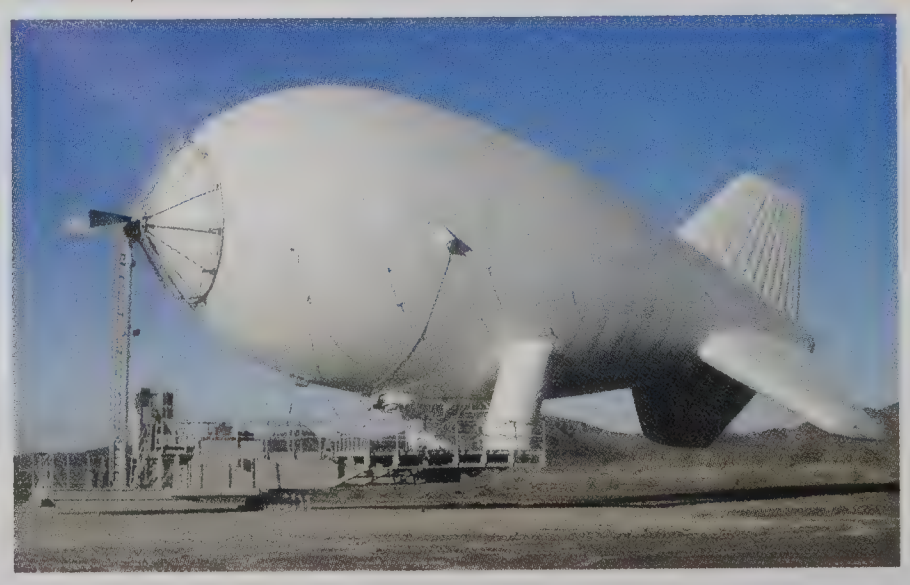
The **Prophet** system (three-block acquisition approach: Blocks I, II and III) is the division, brigade combat team (BCT), Stryker brigade combat team (SBCT) and armored cavalry regiment (ACR) principal ground tactical signals intelligence (SIGINT) and electronic warfare (EW) system that has been designed to support the Army vision, transformation and unit of action battlespace.

Prophet detects, identifies and locates enemy electronic emitters and provides enhanced situational awareness and actionable 24-hour information for the warfighter throughout the division, ACR and BCT areas of operations. Prophet is made up of a vehicular SIGINT receiver mounted on a Humvee on the battlefield, plus a dismounted manpack SIGINT version for airborne insertion or early entry into the battlespace to support rapid reaction contingency and antiterrorist operations.

The Block II/III Prophet is vehicle-mounted on the heavy Humvee with electronic attack (EA), is manportable and will also provide on-the-move (OTM) lines of bearing and reporting capabilities. This OTM capability is a first for tactical SIGINT operations at the brigade level and will provide on-demand actionable information (or force protection) to the commander.

Current Force Unattended Sensors

The uses of multiple mission sensor capabilities have proven to be significant factors in operations; however, managing these numerous sensors can be challenging. Efforts are ongoing in the development and enhancement of these capabilities, specifically in networking unmanned aerial vehicles, unmanned ground vehicles and unattended battlefield sensors.



Persistent threat detection system (PTDS)

The **AN/PPS-5D Ground Surveillance Radar** is manportable and capable of being used for force protection, fire support, intelligence operations, and cordon search-and-raid operations. It is currently being used for detecting and audio-classifying personnel and wheeled and tracked vehicles. Dramatic improvements have been achieved in performance, reliability and maintainability while reducing size, weight and power consumption.

The **AN/GSR-8 Remotely Monitored Battlefield Sensor System-II (REMBASS-II)** is the only fully militarized unattended ground sensor (UGS) system in the world that detects, classifies and provides direction of travel of targets. This worldwide deployable, all weather, day/night, line-of-sight system provides early warning, surveillance and force protection capability in support of battlefield commanders in all types of terrain. It is half the weight and volume of its predecessor, REMBASS-I, with equivalent classification, detection and low false-alarm performance.

REMBASS-II systems are being fielded to Stryker brigade combat teams in support of ongoing intelligence, security, surveillance and force protection operations around the globe. This tamper-proof, electronics support measures/electronic countermeasures-resistant system is the leading U.S. Army remotely controlled, unattended ground sensor system.

OmniSense is a UGS system that provides all-weather, 24-hour, area surveillance, force protection and remote intrusion detection to support the battlefield commander. OmniSense provides target classification, recognition, identification and target location, direction and speed. OmniSense consists of an activity detection unit (seismic-acoustic, magnetic and passive infrared sensors), an imager and a handheld programmer monitor.

The **Unattended Transient Acoustic Measurement and Signature Intelligence (MASINT) System (UTAMS)** is an acoustic sensor consisting of sensor stations linked via radio to a base station. In its current configuration, UTAMS detects and locates any loud event such as mortar or rocket firings, munitions impacts and other explosive events.

The **Persistent Threat Detection System (PTDS)** is a deployed, quick-reaction capability that was designed to meet the urgent surveillance needs of the warfighter. The system is composed of a tethered aerostat equipped with a high-resolution electro-optic/infrared (EO/IR) payload that provides a cue-to-slew capability. PTDS is integrated with existing IR and radar sensors that cue the aerostat camera to provide near-real-time "eyes on target."

Unmanned Aerial Vehicle (UAV) Payloads are essential in many areas of operation and have proven to be key combat

multipliers in military operations. In support of Operation Iraqi Freedom (OIF), the AN/APY-8 Lynx I radar was installed in deployed I-GNAT unmanned air vehicles (UAVs) to augment EO/IR payload capabilities. Three Lynx I radars were installed in three I-GNAT UAVs. The Lynx I is a multifunction radar that operates in synthetic aperture radar (SAR) and ground moving-target indicator (GMTI) modes. SAR modes consist of a spotlight mode and two strip-map modes. High-resolution SAR and GMTI data is processed on board and is data-linked to a ground station for exploitation. The data obtained can be used for coherent change detection (CCD) and amplitude change detection (ACD), both post-processing capabilities. CCD provides the ability to discern extremely small changes in scenery over time. Lynx I/I-GNAT systems completed more than 2,000 hours of operation supporting OIF.

The AN/DPY-1 Lynx II is also a multifunction SAR/GMTI radar that has the same performance as the Lynx I, but in a smaller, lighter package. High-resolution SAR and GMTI data is processed on board a UAV and is data-linked to a ground station for exploitation. The Lynx II consists of a radar electronics assembly (REA) and an antenna/gimbal assembly. SAR modes operate in less than 0.3 meters to 3.0 meters resolution. In the GMTI mode, the radar detects moving targets at speeds of 10 to 70 kilometers per hour and overlays their locations on a digital map. It enhances survivability and improves situational awareness for the UA and brigade/division.

The airborne surveillance, target acquisition and minefield detection system (ASTAMIDS) is being developed to fly on the Class IV RQ-8B Firescout UAV. ASTAMIDS will combine both countermine and RSTA functions in one 75-pound turret so that retasking can be accomplished in flight without having to land and swap out payloads. ASTAMIDS sensors include a MWIR FLIR, a color EO camera, a multispectral imager (MSI) that divides the vis-NIR band into four sub-bands, an 808-nanometer laser illuminator that provides night capability for the MSI sensor, and a lightweight laser designator that also has eyesafe rangefinding capability. The sensors will be housed in a gimbaled turret that has step-stare technology to allow rapid search of wide areas.

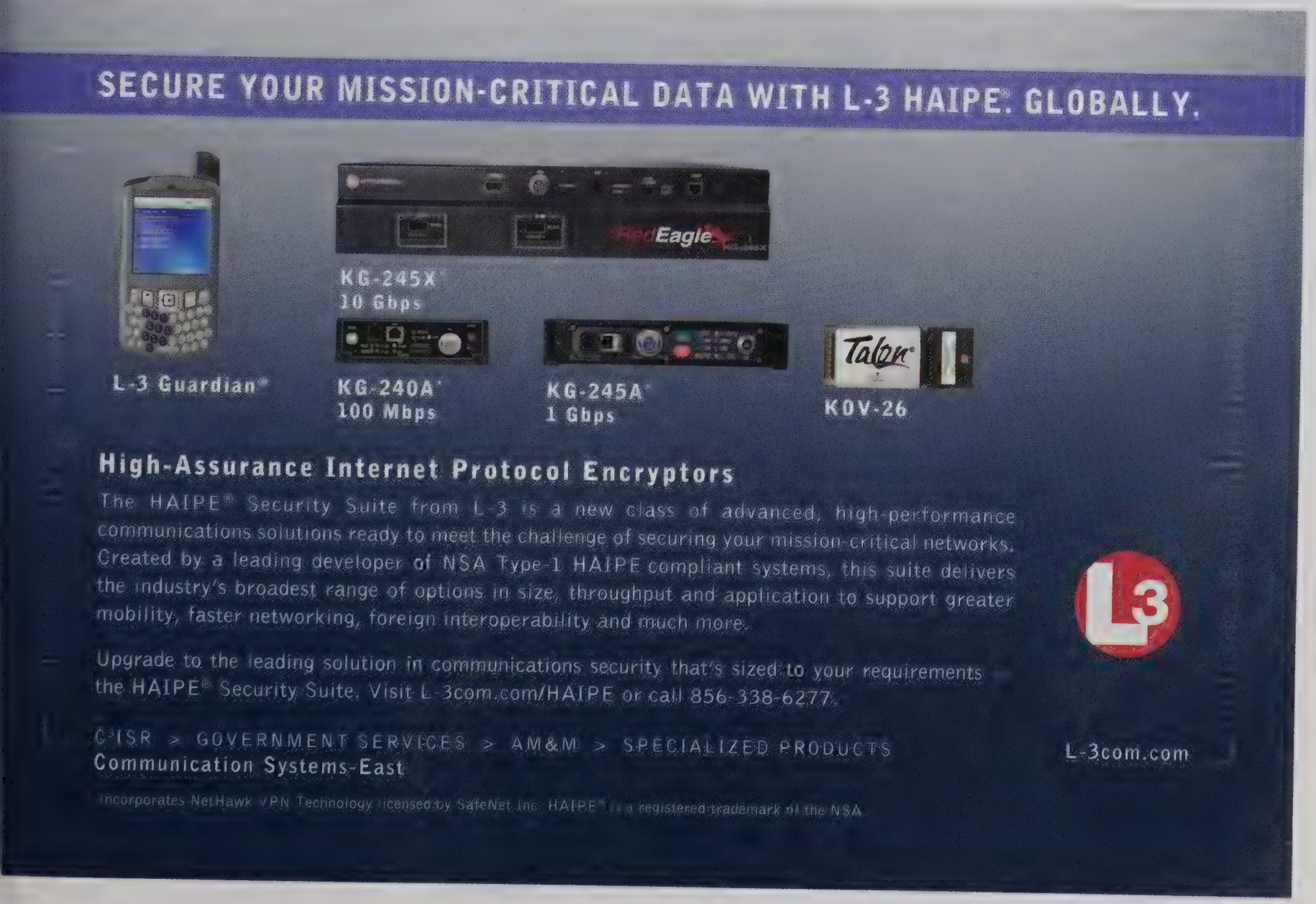
The **Persistent Surveillance and Dissemination System of Systems (PSDS²)** is a system of systems to provide persistent surveillance and rapid dissemination of actionable intelligence. Its purpose is to catch enemy activity in a timelier manner by having sensors cue other sensors and disseminate target location and description data to the appropriate response elements.

Night-Vision Sensors

U.S. Army night-vision and sensor programs and activities include day/night, all-weather mobility and engagement sensors; all-weather imagery; passive and radar target acquisition sensors; artillery and mortar-locating radars; and advanced sensors for the Army's Future Force. These systems provide critical, on-the-ground, direct support to U.S. forces deployed in Operation Enduring Freedom and Operation Iraqi Freedom. One key area is thermal sensors, which dramatically increase the lethality and survivability of U.S. Army soldiers. These sensors read the heat signature from distant objects, such as personnel or vehicles, day or night, penetrating smoke, fog and obscurants.

The **First-Generation Forward-Looking Infrared Systems (FLIR)** are currently used in the pilotage and targeting thermal imaging systems in the AH-64A attack helicopter, M1A1 and M60 tanks, Bradley fighting vehicles and TOW and TOW II missile systems.

The **Second-Generation Forward-Looking Infrared (FLIR)** provides an integrated high-performance second-generation thermal sensor to the Army's premier ground-



based battlefield platforms. The second-generation FLIR is a long-wavelength scanning system with advanced digital image processing. The detector for this assembly is the Army's Standard Advanced Dewar Assembly, type II, using a cryogenically cooled Mercury Cadmium Telluride (MCT) focal plane array. The program produces a common FLIR sensor (B-kit), which is integrated into each specific platform application through the use of a unique A-kit.

The second-generation FLIR has been successfully integrated and tested in the Abrams M1A2 Systems Enhancement Package (SEP) Thermal Imaging System (TIS); the M1A2 SEP Commander's Independent Thermal Viewer (CITV); the M2A3 Improved Bradley Acquisition System; the M2A3 Commander's Independent Viewer (CIV); and the Long-Range Advanced Scout Surveillance System (LRAS3).

Second-generation FLIRs are currently supporting operations in Iraq and Afghanistan with more than 7,500 units fielded to date.

The **AN/VAS-5 Driver's Vision Enhancer (DVE)** is a passive, uncooled thermal imaging system for drivers of combat and tactical wheeled vehicles. It allows continuous vehicle operations by day or night and in the presence of natural and man-made obscurants such as smoke, fog and dust. The DVE's sensor module contains a second-generation thermal imager that provides standard analog video to a high-quality flat-panel display and control module (a militarized commercial active matrix liquid crystal display).

The DVE video imagery can also be distributed to other vehicle crew displays. The display provides an additional input port for display maps and digitized battlefield information.

The **Long-Range Advanced Scout Surveillance System (LRAS3)** provides the U.S. Army with real-time acquisition, target detection, recognition, identification and far-target location information. LRAS3 provides scout forces with a sensor system that operates outside the range of currently fielded threat direct-fire and sensor systems. This long-range target acquisition capability will improve the survivability of the scout force and increase the lethality and force effectiveness of combat units.

The LRAS3 sensor can be operated in both mounted and dismounted configurations, providing 24-hour and adverse weather target acquisition capability. The system is composed of a second-generation horizontal technology integration (HTI) FLIR thermal imager, a day video camera, an eye-safe laser rangefinder, long-range common aperture reflective optics and a GPS interferometer subsystem. The LRAS3 design also includes a digital port, which allows it to interface with battlefield command and control.

Radios & Communications Systems

The **Joint Tactical Radio System (JTRS)** was initiated in early 1997 in response to the services' pursuit of separate solutions to a programmable, modular, multimode, multiband radio to replace existing legacy radios in the Department of Defense inventory. Over time, the JTRS program evolved from a radio replacement program to a mobile ad hoc networking program designed to support the Global Information Grid.

The **Joint Tactical Terminal (JTT)** provides the joint warfighter with seamless, near-real-time tactical intelligence, targeting and situational awareness information. It provides the critical data link to battle managers, intelligence centers, air defense, fire support and aviation nodes across all services. JTT allows Army, Air Force, Navy, Marine Corps and other agency users to exploit current intelligence broadcast networks, including the tactical reconnaissance intelligence exchange system, tactical information broadcast system, tactical related applications data dissemination system, tactical data information exchange system-B, secondary imagery dissemination system and the evolving integrated broadcast service architecture.

PEO Command, Control and Communications-Tactical (C^3T) also coordinates development and fielding of the radio products that form the heart of the Tactical Internet. The **Enhanced Position Location Reporting System (EPLRS)** provides data distribution and position/navigation services in near-real time for the warfighter at brigade and below in support of the battlefield functional areas and the $FBCB^2$ program.



Driver's vision enhancer (DVE) display and control module

The **Near-Term Data Radio (NTDR) System** supports the upper portion of the Tactical Internet by providing the command-center-to-command-center data communications backbone for the Army's digitized division. The NTDR is the Army data communication backbone for platoon to brigade. It is one of the five major elements that provide a seamless digital communication capability throughout the fighting force for the digital battlefield of the 21st century.

The **AN/AYD-1 Personnel Locator System** consists of the PRC-112 radio (General Dynamics Decision Systems), ARS-6 personnel locator (Cubic Corp.) and KY-913 program loader (General Dynamics Decision Systems). The ARS-6 sends out interrogation bursts during combat search-and-rescue missions looking for PRC-112 radios. If the frequency and ID code of the ARS-6 burst is correct, the PRC-112 sends back a 0.4-second reply to the ARS-6 that provides range and steering information to the pilot. The PRC-112 uses unencrypted voice, beacon and transponder modes, but there is also a PRC-112A used by the "black world" that has built-in COMSEC.

The **AN/GRC-240 Have Quick (HQ) II UHF-AM Radio Set** is an M998/M1038 Humvee vehicle-mounted radio system providing antijam electronic counter-countermeasures (ECCM) ultra high frequency (UHF)-AM voice communications. The radio can operate on single-channel normal mode or in the frequency-hopping active mode. Transmitting output power is selectable at 2, 10 or 30 watts. All U.S. armed forces have HQ capability.

The **AN/VRC-83 Radio Set** is tunable in 25-kilohertz steps in the UHF band (225.000 to 399.975 megahertz [Mhz], equaling 7,000 UHF channels). The application of the very high frequency (VHF)/UHF antenna relay kit permits VHF AM communications (116.000 MHz to 149.975 MHz, 1,360 VHF channels). VHF operation is limited to single-channel, non-HQ communications. The operator can simultaneously monitor guard frequency 243.000 MHz while operating in single-channel or HQ mode. Certain applications require improved precise lightweight global positioning system receiver (PLGR) satellite reception; a PLGR remote antenna kit is available.

The **AN/TRC-170 (V)2** and **(V)3 Troposcatter Radio Terminals** are air or ground transportable radio terminals. They provide secure digital long-

haul radio trunking among major nodes of area common user (ACU) system communications networks and interface with other ACU systems, such as digital group multiplexers or various switching facilities. The terminals may be used in standalone applications as transmission links not associated with switching facilities. The terminals transmit and receive digital voice and other data over a nominal 150-mile path for the (V)2 radio and a nominal 100-mile path for the (V)3 radio by means of troposcatter.

The **AN/PRC-126 Radio Set** is a short-range, handheld tactical radio for use primarily at the squad and platoon levels. The AN/PRC-126 is a lightweight militarized transceiver that provides two-way voice communications. The radio covers the frequency range of 30 MHz to 87.975 MHz. Its nominal range for reliable communications over rolling, slightly wooded terrain is 3,000 meters. The radio is capable of interoperating with the AN/VRC-12, AN/PRC-77 and SINCGARS families of radios in the fixed frequency mode. The AN/PRC-126 enables small-unit leaders to control the activities of subordinate elements during operations.

The **AB-1386/U Quick-Erect Antenna Mast (QEAM)** is designed to accommodate the AS-3166/GRC, AS-4292, AS-4225 and A30045068 VHF antennas and a wide range of other antennas in other frequency bands.

The **AN/USC-28(V) Satellite Communications Set (Ground)** is an advanced spread-spectrum modulation system that operates with defense satellite communications system (DSCS) terminals to provide jam-resistant satellite communication (SATCOM) network control and digital user communications.

The **AN/TSC-85B&C** and **AN/TSC-93 B&C Tactical Satellite Communications Terminals** are superhigh frequency (SHF) systems that provide reliable multichannel satellite communications. The C-model terminal contains new modems and converters. All Army terminals have been upgraded to the C-model.

The **AN/GSC-52(V) Satellite Communications Terminal** is a high-capacity, medium-size, superhigh frequency satellite communications terminal designed to operate in the DSCS satellite network. While not an Army system per se, the Army has been assigned the acquisition and sustainment mission for the equipment. The terminals are operated by the various services under the operational control of the Defense Information Systems Agency. The AN/GSC-52(V) modernization program upgrades aging electronics and provides a new control monitor alarm subsystem for all the DSCS terminals (including the AN/FSC-78 and AN/GSC-39). The AN/GSC-52 (V) includes a 38-foot OE-371/G antenna.

The **AN/PSN-13 Defense Advanced Global Positioning System (GPS) Receiver (DAGR)** began fielding in November 2004. It is a handheld, pocket-stored Navstar GPS receiver, incorporating Selective Availability Anti-Spoofing Module (SAASM), and supports military combat operations as well as military and civilian use for operations other than war. DAGR is the follow-on to the currently fielded AN/PSN-11 PLGR and provides an enhanced graphical user interface (GUI) and decreases in size, weight and power consumption. The DAGR can also acquire and provide continuous P(Y)-code tracking of the GPS L1 and L2 frequencies transmitted from all satellites in view.

The **High-Capacity Communications Capability (HC3)** is a joint above-2 ghz high-capacity communications capability for the joint tactical ground domain. It provides secure ground-to-ground, ground-to-airborne and ground-to-satellite communications for joint on-the-move and at-the-halt platforms, and it uses wideband space architecture in a single common architecture and multiband and network (IP) capable terminals.

The **AN/TSC-156 Phoenix Superhigh Frequency (SHF) Terminal** provides multi-

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band capability in the SHF range and operates over commercial and military SHF satellites. The terminal provides high-capacity inter- and intratheater range extension support at selected echelons-above-corps and corps signal units and is designed to be the warfighter's primary means of reach-back communication.

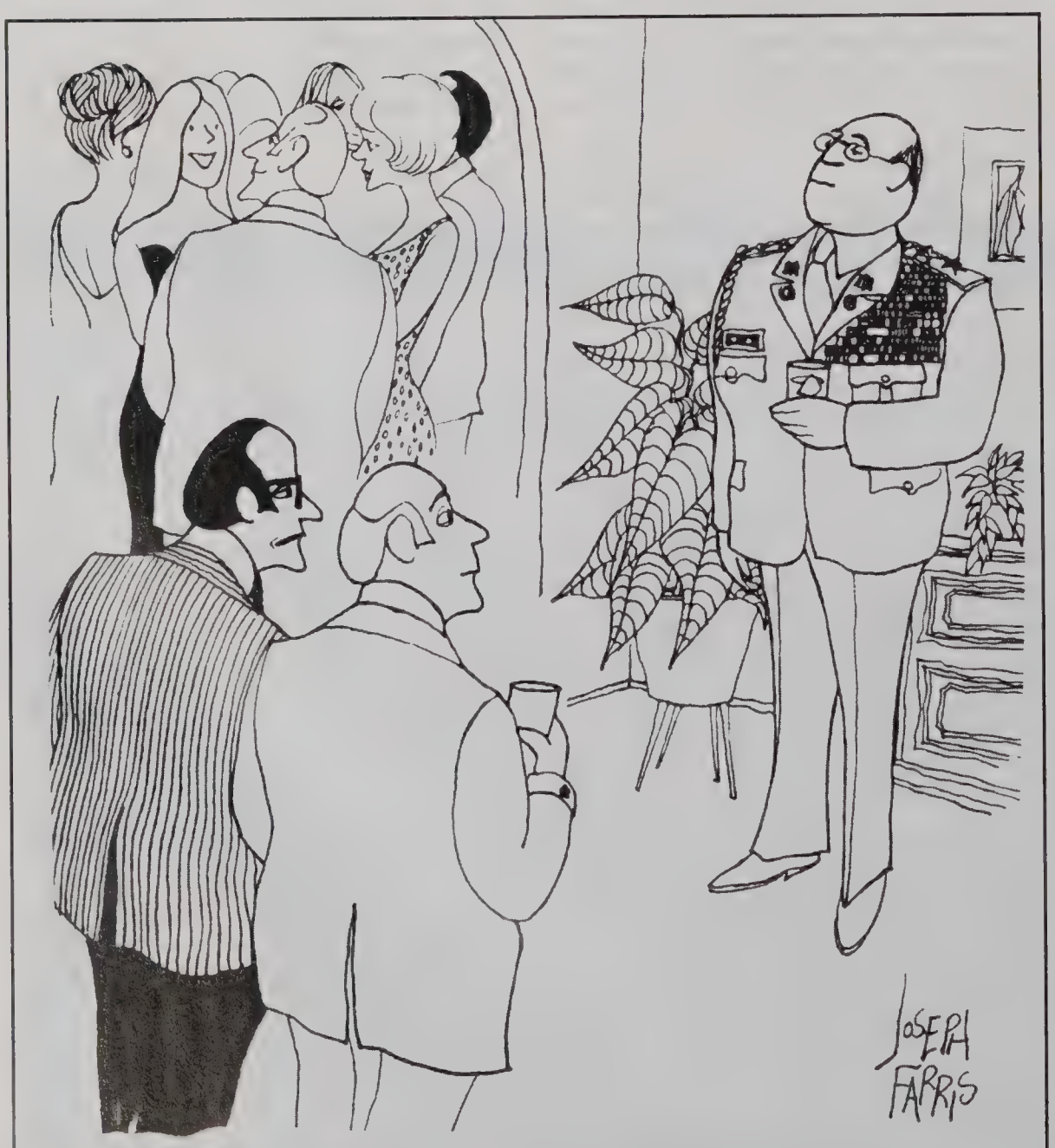
The **Lightweight High-Gain X-Band Antenna (LHGXA)** is an X-Band-only antenna, consisting of a 16-foot reflector mounted on a reinforced trailer. The efficient reflector design results in an RF gain that exceeds the gain of the 20-foot quick-reaction satellite antenna (QRSA). The LHGXA is designed to work with the GMF AN/TSC-85/93 B, C, D.

It also interfaces with the U.S. Air Force and U.S. Marine Corps lightweight multiband satellite terminal, Trojan Spirit II and USC-60A.

The **Lightweight Multiband Satellite Terminal (LMST)** is a tri-band superhigh frequency terminal available in various trailer and transit case configurations. The terminal is contained on a single trailer or in transit case enclosures and operates full duplex over C-, X-, Ku- and Ka-bands (receive only).

The **Secure Enroute Communications Package-Improved (SECOMP-I)** system is a standardized, secure, interoperable and integrated command, control, communications, computers and intelligence (C^4I) information system to support force projection operations. The SECOMP-I system provides VHF/UHF line-of-sight and UHF single-channel tactical satellite (SCTACSAT) beyond-line-of-sight data and voice capabilities to the mission commander and staff while deploying to an area of operations aboard U.S. Air Force C-130 and C-17 aircraft.

The **AN/PSQ-17 Communication Planning System (CPS)** provides communications and management of MILSTAR extremely high frequency (EHF) satellite resources at all echelons. It provides the capability for EHF network planning, EHF terminal image generation, resource monitoring, network operations and terminal support. It supports real-time mission planning and management of all EHF resources in support of joint-service EHF terminal deployment and resides within the Army's SYSCON environment to facilitate centralized planning and management functionality.



'Watch what you say. I think he's carrying a bug!'

The **Secure Mobile Anti-jam Reliable Tactical Terminal (SMART-T)** will provide tactical users with secure, mobile, survivable, anti-jam satellite communications in a Humvee configuration. This equipment will communicate/process data and voice communications at both low and medium EHF data rates.

The **Deployable Ku-Band Earth Terminal (DKET)** is an INTELSAT E2 designator capable of supporting 24 T1 data rate 4.6-meter tracking antenna with 125-mph wind survivability, redundant RF electronics and auto uplink power control. It is an environmentally controlled shelter with redundant HVACs; a remote monitor and control system with pager notification; and redundant generators for critical components. A digital fiber-optic interface system (FOIS) connects to a user baseband up to 2 kilometers. It has a commercial one-year warranty.

The **Joint Network Terminal Communications (JNTC)** consists of a 3.6-meter satellite antenna with satellite and baseband equipment housed in an enclosure mounted on a prime mover. The hub terminal is capable of supporting 24 T1 data rate circuits through the 3.6-meter tracking antenna with 125-mph wind survivability, redundant electronics remote monitor and control; auto uplink power control is contained in the environmentally controlled shelter. Both terminals are Ka-band upgradable. A commercial one-year warranty is provided.

The **Flyaway Tri-Band Satellite Terminal (FTSAT)** is a commercial off-the-shelf nondevelopmental item. The highly transportable, tri-band, transit-case-packaged satellite communications terminal is capable of supporting a variety of worldwide missions. The FTSAT operates over DSCS III, NATO III/IV, INTELSAT, EUTELSAT, PANAMSAT and DOMSAT satellite systems. The terminal modem is interoperable with the GMF, MCIS (AN/TSC-85/93/94/100) and the DSCS Gateway modems and baseband subsystems, and is available in point-point, GMF spoke and GMF hub variants.

FTSAT provides X-, C- and Ku-band satellite communications with local and remote operations. Setup/teardown time is 30 minutes.

The **National Guard Bureau Tri-Band HUB Terminal (NGB-THT)** is a transit-cased transportable flyaway satellite terminal capable of supporting C-, X- and Ku-band frequencies. The THT is capable of using the lightweight high-gain X-band antenna (LHGXA), commercial 2.4-meter or 3.7-meter gigaSAT tracking antenna; supports FDMA and TDMA satellite network topologies; is ground mobile force (GMF) and joint network transformational communications interoperable; and includes a remote monitor and control sys-

tem. A commercial two-year warranty is provided.

THT provides tri-band satellite communications capable of supporting a variety of worldwide missions and is interoperable with all tri-band satellite terminals and teleport earth terminals. Setup/teardown time is 30 minutes.

The **USARPAC Tri-Band Satellite Terminal (U-TST)** is a Humvee (M1113) prime mover-mounted satellite terminal hub, capable of supporting C-, X- and Ku-band frequencies. The U-TST is capable of using the LHGXA tracking antenna and tows a tactical quiet generator (TQG), and supports GMF as well as C⁴ISR communications when operating with the single shelter switch base-band suite of equipment.

The **Mobile Deployable Ku-Band Earth Terminal (DKET)** is a commercial off-the-shelf nondevelopmental item Ku-band prime mover-mounted satellite communications terminal capable of supporting a variety of worldwide missions. The DKET operates with INTELSAT, EUTELSAT, PANAMSAT and DOMSAT.

DKETs provide high-bandwidth inter/intratheater links over commercial satellites, appropriate for camp, base or station where heavy use of voice, data and video services is required.



Warfighter Information Network-Tactical (WIN-T)

Warfighter Information Network-Tactical (WIN-T) is the Army's communications system for reliable, secure and seamless video, data, imagery and voice services that enables decisive combat actions. It is focused on moving information in a manner that supports commanders, staffs, functional units and capabilities-based formations. It is optimized for offensive and joint operations so that the theater combatant commander will have the capability to perform multiple missions simultaneously with campaign quality.

GROUND COMBAT SYSTEMS

The Program Executive Office–Ground Combat System (PEO GCS) serves as the "System of Systems Integrator" of the ground combat systems for the armed forces and leads Army transformation efforts toward future systems while maintaining a current combat-ready force. PEO GCS is a command partner in the TACOM Life Cycle Management Command.

PEO GCS Project Management Offices include Heavy Brigade Combat Team, Joint Lightweight Howitzer, Mine Resistant Ambush Protected Vehicles, Modular Brigade Enhancements, Stryker Brigade Combat Team and Robotics Systems Joint Project Office.

As an example, the **Project Manager for the Heavy Brigade Combat Team** (PM HBCT) serves as the life-cycle manager for the major combat vehicles in the Army's heavy forces, including the Abrams, M88, Bradley, M113, M109 and Knight family of vehicles. Combined, these fleets total 32,682 platforms in various stages of their life cycles under PM HBCT's management purview, and total program funding through fiscal year 2013 of approximately $36.8 billion. PM HBCT's responsibilities include the design, development, produc-



M1A1 Abrams tank



tion, fielding and sustainment (reset, recap and upgrade) of safe, reliable and lethal ground combat systems.

Product Manager Abrams manages approximately 8,325 platforms within the Abrams family of vehicles, including M1A1, M1A1 AIM and M1A2 SEP tanks, M88A1/A2 recovery vehicles and M104 Wolverine assault bridge.

M1A1, M1A1 AIM and M1A2 SEP Tanks

The **M1 Series Abrams Tank** provides the Army with mobile, protected firepower and will remain the cornerstone of the Army's counterattack and containment forces as the Army transforms to the Future Force. The Abrams tank provides soldiers with the lethality, survivability and staying power to successfully close with and destroy enemy forces on the integrated battlefield. The 120 mm main gun on the M1A1 and M1A2, combined with the powerful 1,500-hp turbine engine and special armor, make the Abrams tank particularly suitable for attacking or defending against large concentrations of heavy armor forces on a highly lethal battlefield and for other roles that require shock effect and mobile direct firepower to support Army mission requirements.

Two major programs maintain and recapitalize the Abrams fleet: the M1A2 systems enhancement program (SEP) and the M1A1 Abrams integrated management (AIM) program.

The M1A2 program provides the Abrams with the necessary improvements in lethality, survivability and fighting ability required to defeat advanced threats. It is the Army's first digitized, direct-fire combat vehicle.

The M1A2 has a digital command-and-control system that provides situational awareness updates to all the other tanks in a unit. Vetronics architecture ties all electronic components in the tank together and provides increased survivability and supportability. The commander's independent thermal viewer gives it a hunter-killer capacity. The M1A2 also has improved onboard diagnostics that allow the tank to

2010 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its fifteenth annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2009.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints, color prints or color slides. Photographs must not be tinted or altered. (Send digital photos to jdow@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The smallest format for slides is 35mm, and slides must be in plastic or paper mounts.
7. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, Social Security number (for identification and tax purposes), address and telephone number, and caption information.
8. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
9. Entries must be postmarked not later than June 30, 2010. Letters notifying the winners will be mailed in September.
10. Entries will not be returned.
11. Employees of AUSA and their family members are not eligible.
12. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
13. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jeremy Dow (jdow@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.

troubleshoot itself without any additional special tools or equipment.

Further M1A2 improvements, through the SEP, are under way. The M1A2 SEP is the backbone of the Army's first digitized division and the counterattack corps of the Army's current force. It is the only weapon system that can withstand the impact of high-energy warheads and remain lethal in high-mobility and sustained operations. It has integrated combat command and control (IC^3), which incorporates Force XXI Battle Command Brigade and Below ($FBCB^2$) to provide command and control and situational awareness.

Its sights use the latest thermal-imaging system (second-generation forward-looking infrared, or FLIR) for increased lethality and survivability. The M1A2 SEP tank takes advantage of computer/electronic industry advances by including improved electronics developed since the introduction of the M1A2.

The SEP package includes a new computerized mass-memory unit and color maps and displays. A thermal management system increases electronic reliability and decreases crew fatigue.

Production deliveries of the M1A2 SEP tank began in September 1999. These vehicles were used extensively during OIF.

The Army must sustain the readiness and reduce the operations and support costs of approximately 4,300 older M1A1 Abrams main battle tanks in its active and reserve component units.

The **Abrams Integrated Management Program (AIM)** is the recapitalization program for the M1A1 tank. Under AIM, M1A1 tanks are completely disassembled at Anniston Army Depot, Ala. The depot refurbishes many of the tank's components.

The assemblies are then shipped to the Joint Systems Manufacturing Center (JSMC) in Ohio, where General Dynamics Land Systems reassembles the tanks to a zero time/zero miles standard.

The AIM program has fielded tanks to units at Fort Hood, Texas, and in Germany. Annual production now stands at 135 tanks per year and will continue until 2012.

In addition, AIM serves as the venue to apply modifications and upgrades to the tank, including embedded diagnostics. AIM also serves as a means to combat electronic obsolescence by introducing improved line-replaceable units for those that face technical obsolescence. The AIM process also incorporates redesigned hull and turret network boxes.

The **M88A2 Heavy Equipment Recovery Combat Utility Lift and Evacuation System (Hercules)** is a full-tracked, heavy armored vehicle developed to accomplish the safe, effective and independent battlefield recovery operations.

It implements swift and effective combat evacuations through the battlefield recovery operations of towing, winching and lifting. The Hercules uses the M88A1 chassis modified to significantly improve towing, winching, lifting and braking characteristics.

It is the primary recovery support for the 70-ton M1 Abrams tank, the Wolverine and other heavy combat vehicles.

The M88A2 includes a 1,050-hp engine; a 35-ton boom; overlay armor; a 140,000-pound, single-line, constant-pull main winch; and a 3-ton auxiliary winch for deploying the main winch cable. When compared to the M88A1, these upgrades improve towing power by 25 percent, lifting capability by 40 percent and winching ability by 55 percent.

The system is in full-rate production and deployment. Fielding began in July 1997, and it achieved first unit equipped in July 1997.

The **M104 Wolverine Heavy Assault Bridge (HAB)** is an M1A2 Abrams SEP variant and is operated by a two-man crew. The 26-meter bridge can span gaps of up to 24 meters to support heavy maneuver operations at 16 kph.

The bridge is computer-controlled and automatically compensates for minor deviations in launch-site elevation and terrain rack and cant. The crew can launch the bridge under armor in five minutes and retrieve it in less than 10 minutes.

The M104 Wolverine enables decisive



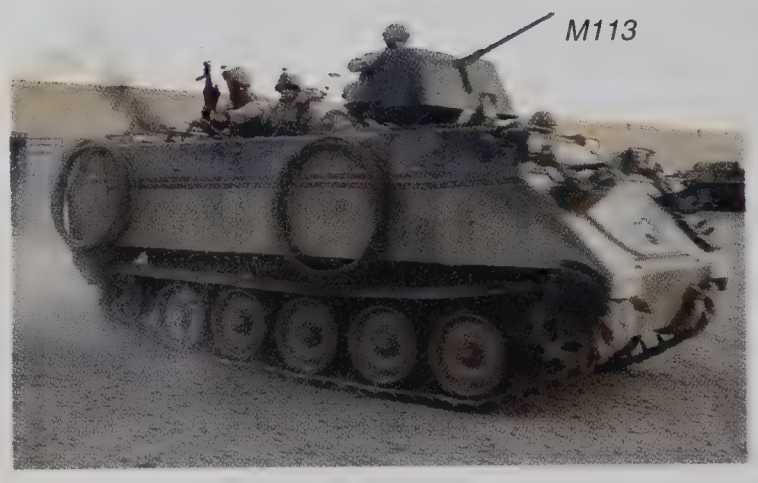
maneuver by allowing units to span tank ditches, road craters and partially damaged bridge sections up to 24 meters wide at combat speeds.

Product Manager Bradley

Product Manager Bradley manages approximately 6,452 M2/3A2, M2/3A2 ODS and M2/3A3 Bradleys and approximately 13,943 M113 series platforms.

The **Bradley M2A3 Infantry/M3A3 Cavalry Fighting Vehicle (IFV/CFV)** facilitates enhanced command-and-control capabilities, provides mobile protected transport of an infantry squad to critical points on the battlefield and performs cavalry scout and other essential (Bradley-equipped fire-support and Stinger teams) missions in the 21st century. Upgrades in this program include advanced technology in the areas of command and control, lethality, survivability, mobility and sustainability, required to defeat current and future threat forces while remaining operationally compatible with the main battle tank.

The M2/M3 vehicle armament includes the 25 mm M242 Bushmaster cannon, the TOW II missile system and a 7.62 mm M240C machine gun.


M113

The M2A3/M3A3 provides overwatching fires to support dismounted infantry and to suppress and defeat enemy tanks, reconnaissance vehicles, infantry fighting vehicles (IFVs), armored personnel carriers, bunkers, dismounted infantry and attack helicopters. The infantry version (M2) of the A3 Bradley fighting vehicle is used most often to close with the enemy by means of fire and maneuver. The primary tasks performed by the cavalry version (M3) as part of a troop and/or squadron are reconnaissance, security and flank guard missions.

The A3 is the consummate digitized platform, with a core electronics architecture on a 1553 data bus and an improved target acquisition system that includes a full ballistic fire-control package with hunter-killer functionality via a commander's independent viewer (CIV). Optical improvements also include two second-generation FLIRs and day television cameras, which can be displayed to the squad members in the back of the vehicle via the rear-mounted squad leader's display. This feature significantly improves the real-time situational awareness for the entire dismounted or mounted crew.

The A3 integrated combat command-and-control (IC^3) package incorporates the Army's digital command-and-control suite of automated messages, overlays and friend-or-foe graphics that meet the Army's objectives for a fully digitized force. This same digital command-and-control capability was incorporated into the A2 Operation Desert Storm (ODS), including a squad leader's display for messages and graphics.

The A3 variants reflect the latest iterations of a fighting vehicle family that includes the Bradley M2/M3A0, A1, A2, A2 ODS, IFV/cavalry fighting vehicle (CFV), Bradley fire-support team (BFIST) vehicle and M2A2 ODS engineer vehicle. Additional Bradley variants, based on the associated tracked M270 multiple-launch rocket system (MLRS) chassis, range from command-and-control systems to armored medical treatment vehicles.

The **M4 Command and Control Vehicle (C^2V)** program emerged from lessons learned during Operation Desert Storm. Based on the Bradley family's MLRS chassis, the M4 C^2V is a self-contained platform with onboard support subsystems capable of providing adequate power for mission equipment and NBC protection and environmental control.

Platform components include a primary power unit that can provide 21,000 watts of AC and 4,600 watts of DC power, an antenna compartment that supports a 10-meter nesting mast, a 579-cubic-foot crew/mission equipment compartment, a biochem system (100/200 cubic foot per minute with 1.5 inches of water overpressure) and an environmental cooling unit (40,000 BTU-per-hour cooling).

A March 1994 engineering and manufacturing development contract was followed by three low-rate initial production awards that covered a total of 25 vehicles. The final vehicles covered under that contract were delivered in June 2001.

Although the M4 C^2V program was terminated in December 1999 to provide funding for the Army's new Stryker armored vehicle acquisition, the Army pulled the systems out of storage and issued most of them for combat use during Operation Iraqi Freedom.

The **M113 Family of Vehicles (FOV)** pro-



'Be generous, General. Think of it as a defense budget.'

vides a highly mobile, survivable and reliable tracked-vehicle platform that, with upgrades, is able to keep pace with Abrams- and Bradley-equipped units and is adaptable to a wide range of current and future battlefield tasks through the integration of specialized mission modules. Although not presently in new production, the 14,795 M113 FOV systems now in Army vehicle inventories constitute a significant percentage of present and future heavy division assets.

Recent activities within the M113 FOV focused on upgrading several models of the vehicles to meet or exceed the mobility characteristics of the supported maneuver force. The most recent upgrade to see wide fielding is the A3 reliability improvement for selected equipment (RISE). RISE provides various derivatives within the FOV with major performance improvements in mobility, reliability and survivability through installation of a 275-hp 6V53T engine with an X-200-4A transmission.

Coupled with reconfiguration of the driver's station and several other vehicle subsystems, these improvements provide battlefield mobility commensurate with the supported Abrams/Bradley maneuver force. Moreover, the increased performance provided by this and other upgrade packages permits a range of enhanced survivability options.



Paladin/FAASV

Product Manager Fire Support Platforms

Product Manager Fire Support Platforms manages approximately 2,582 platforms, including the M109A6 Paladin/M992A2 FAASV System, the Paladin/FAASV Integrated Management (PIM) program, the M707/M1200 Knight family of vehicles, and the M7/A3 Bradley Fire Support Team (BFIST) vehicles.

Paladin/FAASV: The M109A6 Paladin 155 mm self-propelled Howitzer provides the primary indirect fire support to modular HBCTs and armored cavalry regiments. Like the earlier M109 models, the M109A6 Paladin is a fully tracked, armored vehicle. The enhanced Paladin configuration is achieved through extensive modifications to existing M109A2/A3 vehicle hulls and

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the subsequent introduction of an entirely new turret structure. The Paladin includes an onboard Paladin Digital Fire-Control System (PDFCS) that provides ballistic computation, weapon control, a vehicle location/navigation system, secure radio communications systems, an improved M284 cannon and M182A1 gun mount, automotive improvements, improved ballistic and nuclear-biological-chemical protection, driver's night-vision capability, and built-in test equipment. Additional chassis upgrades include a remotely actuated travel lock (for quicker replacement and displacement), longer torsion bars (to help support the new turret) and a low-heat rejection engine with an improved cooling system. Described as the first digitized combat vehicle in the Army's inventory, the Paladin has improved responsiveness, survivability, lethality and reliability compared to the earlier M109s.

A parallel U.S. Army recapitalization effort was seen in the M992A2 Field Artillery Ammunition Supply Vehicle (FAASV). The basic M992A0 FAASV emerged from an industry research and development project designed to provide self-propelled field artillery units with a ballistically protected vehicle capable of performing critical resupply and support functions. The FAASV system was type classified and entered production in 1983. It was based on an M109 howitzer chassis that provided the resupply asset with mobility and survivability characteristics commensurate with the supported cannon element. The system is paired on a one-for-one basis with the Army's M109A6 Paladin self-propelled howitzer.

Paladin Integrated Management (PIM): The PIM program is a sustainment program engineered to improve readiness, avoid components' obsolescence and increase sustainability of the M109A6 Paladins and the M992A2 FAASVs platforms out to the year 2050. The upgrades will allow the PIM to fire Excalibur (XM982) rounds and fuzes such as the precision guidance kit. Operationally, the PIM will be faster and more maneuverable, sustainable and lethal. PIM will leverage fleet commonality for key components including the Bradley engine, transmission, final drives, suspension and the FCS NLOS-C Rammer. PIM will ensure the Paladin fire support platform continues to meet the needs of the Army's HBCT maneuver commander by improving fires support response and increasing the mobility of the fires support platform. The PIM uses the existing M109A6 main armament, recently designed cab structure, Chief of Section Protection, and belly plate and side armor improvements, increasing crew survivability while replacing outmoded chassis components with advanced components from the Bradley fighting vehicle to increase sustainability and commonality across the HBCT. PIM also incorporates select technologies from the NLOS-C, including an automated (modified electric) projectile rammer and modern electric-gun drive systems to replace the current hydraulically operated elevation and azimuth drives that were designed in the early 1960s. The M109 FOV platforms will be fitted with Blue Force Tracker capability to ensure compatibility with future architectures. These upgrades and better communication technology will significantly improve operational awareness on the battlefield and reduce the logistics footprint within the HBCT. The new electric-gun drives and rammer components as well as a microclimate air conditioning system will be powered by the Common Modular Power System (CMPS). CMPS, which will also be installed on Stryker and has been installed on High-Mobility, Multipurpose Wheeled Vehicle (Humvee) demonstrator vehicles, is based on architecture jointly developed by the Army Tank-Automotive Research Development and Engineering Center and the Program Executive Office-Ground Combat Systems. Once delivered to the field, the PIM M109 FOVs will give HBCT commanders upgraded capabilities including more maneuverability, higher rate of speed, increased crew survivability and delivery of accurate and timely fires where and when needed. In addition, the upgraded Paladins and FAASVs will be more sustainable, providing commanders increased confidence in their artillery fleet.

M707 Knight/M1200 Armored Knight: The M707 Knight was developed and fielded during the late 1990s. Based on the M1025A2 Humvee chassis, the M707 features a mission equipment package fully adapted to support the U.S. Army Field Artillery Combat Observation Lasing Team (COLT) mission with G/VLLD and AN-TAS-4 sensors. In 2003, the M707 was enhanced with a fire-support sensor system (FS3) second-generation FLIR based on the LRAS3.

Fielded to both Infantry and heavy brigade combat teams (BCTs), Knights consist of a laser designator and rangefinder, thermal imager, digital command-and-control system, blended inertial/global positioning system navigation and targeting capability, and a self-defense weapon. COLTs use the Knight precision targeting systems, along with the forward observer system (FOS) software, to provide precise far-target location and laser designation for conventional ordnance, laser-guided munitions and precision-guided projectiles such as Excalibur.

First fielded in 2008, PM Fire Support Platforms developed the M1200 Armored Knight to provide improved survivability for the COLTs. Integrating the M707 mission equipment package (MEP) onto the more survivable M1117 armored security



M1200 Armored Knight

hicle chassis, the M1200 Armored Knight ds 360-degree continuous cupola rota-n, CREW II, high frequency radio capa-ty, and M2HB .50-caliber capability. To e, 107 M1200 Armored Knights have en fielded to support operations in Iraq d Afghanistan. In addition, 38 systems scheduled to be fielded to IBCTs and CTs through the remainder of fiscal ar (FY) 2009, and 138 more Armored ights will be fielded via new production reset in FY 2010.

Product improvements are currently un-way to incorporate targeting under ar-r/on the move onto the M1200 Armored ght. The program will accomplish this incorporating a common remotely oper-d weapons system II (CROWS II) and a note stabilized sensor system (CRS^3) onto Armored Knight. This capability will the soldier under armor for operations, h no degradation in capability. Addi-al efforts are under way to add a fourth wmember and upgrade the MEP and ware to a more open architecture. The gram is currently funded for 103 up-ded Knights and will begin fielding in 2012.

M7/A3 Bradley Fire Support Team (BFIST): The BFIST program is executing he Army campaign plan and will com-e modularization of the force in FY 3 with 20 heavy brigades of A3 BFISTs 11 heavy brigades of M7 BFISTs. ST vehicles are required to conduct ous mission scenarios including recon-sance and surveillance, reporting of ny activity in the area of operations, orting of hazards and obstacles to vement, and the coordination of indi-fire support. Both versions have ivalent mobility, survivability, signa-and night-vision capability and con-sume common repair parts as the maneu-ver force they support. Target designation for all available laser-guided munitions is required, including those delivered by mortars and airborne platforms. Dismount operations are required under some condi-tions. Extensive and real-time communica-tions with other members of the force and rear-area command posts is required for mission success. Interoperability in the net-centric array of other systems de-mands full compatibility with the newest C^{4}ISR equipment and procedures.

The M7 BFIST is one of the two models that replaces all the M981s (FISTVs) in the active force at the company FIST opera-tional facility. The M7BFIST integrates both existing and improved FIST mission equip-ment packages onto an M3A2 Operation Desert Storm (ODS) chassis. Some of the mission equipment, such as the G/VLLD, will be taken directly from displaced FISTVs and stowed. Features incorporated from the M3A2 ODS chassis include the 25 mm gun, 7.62 coaxial machine gun, preci-sion lightweight global positioning system (GPS) receiver (PLGR) and the Bradley eyesafe laser rangefinder. The current M7 BFIST uses the integrated sight unit, which is also used as the gun sight for self-de-fense. The M7BFIST uses the standalone computer unit (SCU), the ruggedized handheld computer and the forward ob-server system with full interoperability with AFTADS fire-support networks. The inertial navigation system (INS) provides navigational capability based on a blended inertial/GPS solution. The mission proces-sor unit (MPU) calculates target grid loca-tion by processing information received from the INS, and mission information from the the targeting station control panel (TSCP) serves as the primary operator in-terface. The TSCP functions are controlled through a series of menus. The TSCP con-trols the 1553B data bus. The MPU sends processed information back to the TSCP and SCU for display and routing over the single-channel ground and the airborne ra-dio system to external fire-support ele-ments. The first unit equipped (FUE) with the M7 BFIST was the 3rd Infantry Division in FY 2000.

The second model BFIST is the A3BFIST. The A3BFIST incorporates the FIST MEP with a digitized M3A3 chassis. Features in-corporated from the M3A3 chassis include: the commanders' independent viewer with 360-degree traverse and the im-proved Bradley acquisition system (IBAS), both second-generation FLIRs, to improve target acquisition and target engagement; the 25 mm gun; 7.62 coaxial machine gun; PLGR; and digital command-and-control enhancements. The first unit equipped for the M3A3 BFIST was the 4th Infantry Divi-sion.

An effort is under way to incorporate the fire support sensor system (FS^3) onto the A3 digitized BFIST. In addition to the improved features of the M3A3, the A3 BFIST with FS^3 will allow the fire support team to detect, identify and designate tar-gets for precision munitions at greater ranges while remaining "buttoned up"—protected by the vehicle's armor. The new ranges will meet Office of Research and Development requirements and will also allow for laser-guided smart munitions, laser-guided bombs, and missiles for ro-tary and fixed wing aircraft. The first unit scheduled to be equipped with the M3A3 BFIST is the 2nd Brigade, 1st Artillery Di-vision, in FY 2011.

PM Joint Lightweight Howitzer

The Project Manager for the Joint Light-weight Howitzer takes a joint (Army and Marine Corps) perspective in managing the development, acquisition, testing, sys-tems integration, product improvement and fielding of the M777A2 155 mm joint Lightweight Howitzer system, designed to enhance strategic mobility and provide the Infantry soldier and marine with effective and responsive fire support. Their task is to provide a world-class, supportable how-itzer system to artillery cannoneers, per-mitting them to accomplish their missions.

The **M777A2 155 mm Joint Lightweight Howitzer (LW155)** is a joint Marine Corps and Army program to replace the M198 155 mm towed howitzer. The LW155 is a

M777A2 howitzer



general support system for the Army's light units and direct-support cannon fire-support system for the Stryker brigade combat team. It is designed to be the sole howitzer in the Marine Corps.

Its primary performance parameters are a howitzer weight of less than 10,000 pounds, emplacement time of two to three minutes and a displacement time of one to two minutes.

The LW155 uses the M776 155 mm cannon, giving it a maximum firing range of approximately 30 kilometers with rocket-assisted projectiles and 24.7 kilometers with standard rounds. It has a maximum firing rate of four rounds per minute and a sustained rate of two rounds per minute.

The M777A1 is fitted with onboard electronics, giving it self-locating, self-laying and digital communications similar to the M109A6 Paladin. The M777A1 was unconditionally approved for use by Army units in January 2007.

The new M777A2 adds the ability to fire the Excalibur precision-guided munition. The M777A2 was approved for use in September 2007.

In addition to the M777 series howitzer, other towed artillery systems being supported in U.S. Army inventories include the M119A2 105 mm howitzer as well as the M198 155 mm howitzer.

The **M119A2** is a lightweight 105 mm howitzer that provides continuous close fires to the Infantry brigade combat teams (IBCTs). The system weighs 4,270 pounds and is air assault/airdrop capable. It has a range of 19.5 kilometers with rocket assisted munitions (14 kilometers unassisted). It fires all currently fielded U.S. munitions and has a rate of fire of six rounds per minute. Each M119A2 section has seven crewmembers. The M119A2 is fielded as two eight-gun batteries for each M119A2 battalion.

The M119 was originally acquired in 1986 as a nondevelopmental item from Royal Ordnance Plc. The original 147 howitzers were manufactured in the United Kingdom and the balance produced at Rock Island Arsenal, Ill. The current fleet of M119A2s in the inventory from the first production run is 382 systems. U.S. fire control and a low-temperature-capable recuperator were implemented as the M119A1 in 1991. The light artillery system improvement program resulted in the M119A2, which possessed a number of improvements to enhance the ease of operation and maintenance of the weapon system. Approved prime movers include the Humvee and 2.5-ton and 5-ton trucks.

In 2004, it was determined that U.S. Army Modularity requirements had increased the M119A2 authorized acquisition objective to 893 systems. A decision to reenter production was made by the general officer steering committee. In 2005, the Program Executive Officer for Ground Combat Systems, through the commanding general, U.S. Army Tank-automotive and Armaments Command (TACOM) Life Cycle Management Command, endorsed the make-or-buy recommendation to produce the M119A2 towed howitzer at Rock Island Arsenal. The analysis was conducted under the authority of 10 USC 4532 and in accordance with the Army Industrial Base Process, Army Regulation 700-90 dated 14 December 2004. Cannons would continue to be produced at Watervliet Arsenal, N.Y., and basic issue items for the system are being purchased out of the government supply system. Production at Rock Island and Watervliet Arsenals commenced with the receipt of the FY 2005 Defense Supplemental funding. The last weapon order will be in FY 2010, and the last deliveries will be taken in FY 2012. A full materiel release of these new production howitzers was approved by the commanding general, U.S. Army TACOM Life Cycle Management Command, in June 2008.

A program to integrate a digital fire-control capability onto the M119A2 howitzer (becoming the M119A3 howitzer) was approved by the Program Executive Officer for Ground Combat Systems (PEO GCS) and the commanding general of the Field Artillery School Center of Excellence in January 2008. Direction was provided to maximize commonality across the IBCTs to the maximum extent possible, thus minimizing the IBCT logistics footprint. Leveraging the software for the M777A2 155 mm howitzer maximizes commonality in operation and training while minimizing program cost, schedule and risk. The requirement for this capability is the materiel change package for digitization of the M119A2 105 mm Light Towed Howitzer. The application of a digital fire control will allow the digitized M119A2 to emplace and displace faster, provide more responsive fires and allow the system to become more survivable on the battlefield.

To provide even greater range and lethality for light-unit fire-support elements, the Army began fielding the **M198 155 mm Towed Howitzer** in early 1979. As a successor to the older M114A1 155 mm towed system, the 15,750-pound (original fielded weight) M198 provided a maximum range of 30 kilometers (with rocket-assisted projectiles) and the capability to fire a broader range of ammunition options than those available for 105 mm units.

Normally towed by a 5-ton truck, the M198 can also be moved by a CH-47D Chinook helicopter or Air Force assets, C-130 and larger.

Project Manager Mine Resistant Ambush Protected (MRAP) Vehicles

The **Project Manager for Mine Resistant Ambush Protected (MRAP) Vehicles** program will rapidly field highly survivable, mobile, multimission vehicles to the joint force to meet urgent operational requirements.

MRAP vehicles are commercial off-the-shelf vehicles designed from the ground up to reduce casualties and increase survivability for personnel subjected to mine explosions, improvised explosive device detonations and small-arms fire. Multiple missions will be supported by the MRAP fleet, including recon, convoy operations, troop transport, ambulance, combat engineer and explosive ordnance disposal missions for maneuver units. The Pentagon has approved the expansion of the MRAP program to more than 20,000 vehicles, with the U.S. Army increasing its fleet of MRAP vehicles from the planned 2,300 to 17,700.



Mine resistant ambush protected (MRAP) vehicles

In 2005, **Project Manager for Modular Brigade Enhancements (PM MBE)** was established and chartered to be the centralized manager for enhancements to the modular brigade combat teams (MBCT). Specific PM MBE responsibilities are to manage the post-Milestone C program and lead the effort to field the Army modernization technologies into selected MBCTs in a consistent and synchronized manner.

The **Project Manager for Stryker Brigade Combat Team (PM SBCT)** develops, produces and sustains the full range of safe, reliable, supportable and effective Stryker vehicle systems, a diverse fleet of medium-weight vehicles capable of being rapidly deployed to trouble spots around the world. These vehicles leverage existing military "state of the art" technologies in order to provide world-class equipment to the soldier in record time.

Stryker Family of Vehicles. "We must provide early entry forces that can operate jointly without access to fixed forward bases, but we still need the power to slug it out and win decisively." This was the challenge in 1999 given by then-Army Chief of Staff GEN Eric K. Shinseki. The response was brigade combat teams and the Stryker family of vehicles, the "vanguard for Army transformation."

The Army's responsibility to satisfy 21st-century requirements for effective full spectrum operations requires an improved capability for the rapid deployment of highly integrated, combined arms forces possessing overmatching capabilities, exploiting the power of information and human potential, and combining the advantages of both light and mechanized forces across the full range of military and nonmilitary operations.

The Stryker was the first new combat vehicle to be acquired by the Army for more than 20 years. The primary design has two variants: the M1126 infantry carrier vehicle (ICV) and the XM1128 mobile gun system (MGS). The ICV is a troop transport vehicle capable of carrying nine infantry soldiers and their equipment and requires a crew of two, a driver and a vehicle commander. There are eight other ICV configurations with combat service and combat support roles. Those configurations include the M1130 commander's vehicle, the M1127 reconnaissance vehicle, the M1131 fire-support vehicle, the M1129 mortar carrier/XM1129A1 mounted mortar carrier, the M1134 antitank guided missile vehicle, the M1132 engineer squad vehicle, the M1133 medical evacuation vehicle and the XM1135 nuclear-biological-chemical reconnaissance vehicle. The SBCT will also be furnished with the mobile gun system. The MGS, now under development, will be based on the ICV but modified to incorporate a 105 mm turreted gun, an autoloader system and a crew of three.

The ICV is armed with a remote weapons station that supports the M2 .50-caliber machine gun or the Mk 19 automatic grenade launcher, the M6 countermeasure device (smoke grenade launcher) and an integrated thermal weapon sight. The Stryker supports communications suites that integrate the single-channel ground-and-air radio system radio family (SINCGARS); enhanced position location reporting system (EPLRS); Force XXI Battle Command Brigade and Below ($FBCB^2$); global positioning system (GPS); and high-frequency and near-term data radio systems. The Stryker provides up to 14.5 mm of ballistic protection.

General Dynamics Land Systems produces the Stryker, which is powered by a 350-hp diesel engine, runs on eight wheels that possess a run-flat capability and has a central tire inflation system. It also incorporates a vehicle height management system.

Robotic Systems Joint Project Office

Finally, the PEO GCS Robotic Systems joint Project Office takes a joint (Army and Marine Corps) perspective in managing the development, acquisition, testing, systems integration, product improvement and fielding of robotic systems that will form the backbone of the force of the future. We are spearheading development of the first-generation system employing the latest sensor, remote navigation, and command-and-control technologies to integrate

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robotics into the battlefield. Speeding these technologies to the battlefield has the potential to revolutionize combat operations.

The Robotic Systems Joint Project Office (RS JPO) serves as the life-cycle manager for all current and future Army and Marine Corps unmanned ground systems. The following are priorities of the RS JPO mission: support the joint warfighter, modernize current unmanned systems, facilitate the transformation to the Future Force, apply continuous process improvement, conduct sound systems-engineering practices and develop the workforce. A healthy partnership with industry, academia, government research centers and the user community has enabled the RS JPO to develop, acquire, field and sustain robotic systems, exceeding warfighter expectations.

Its mission is to lead the development, systems engineering, integration, acquisition, testing, fielding, sustainment and improvement of unmanned systems for the joint warfighter to ensure safe, effective and supportable capabilities are provided while meeting cost, schedule and performance.

Its vision is continuous improvement of unmanned system capabilities to meet current and future joint warfighter objectives.

Support to the joint warfighter in overseas contingency operations has greatly accelerated acquisition and fielding timelines. Delivering safe, effective unmanned systems with a variety of mission payloads in response to joint urgent operational needs has created a number of opportunities as well as challenges for the RS JPO and its partners. Operational needs from theater have defined mission requirements for ground robots from explosive ordnance disposal to area and route clearance and reconnaissance and surveillance. This has resulted in the proliferation of ground robots on the battlefield. Initially, EOD units and route-clearance teams adopted ground robots to interrogate and neutralize improvised explosive devices or unexploded ordnance. Warfighters have since identified mission applications for robots to inspect vehicles; search caves, rubble and tunnels; extend reach and provide enhanced situational awareness. The U.S. industrial base has grown to meet the demand for unmanned systems. This growth is evident across all sectors of the market, including basic and applied research at academic institutions and government laboratories, prototyping and commercialization by small businesses, and manufacturing, production and sustainment operations by traditional defense contractors, automotive suppliers, new companies and government organizations.

In the haste to field robots in Iraq in 2003, commercial off-the-shelf equipment was procured and fielded to get systems in the hands of soldiers and marines as quickly as possible. Initially, demand for robots outpaced the supply capability of industry. Industry responded by cranking up production capability, which spawned a number of tier suppliers and upstart robotic companies. Competition increased, and innovative, quality products ensued. This dynamic six-year period has created a configuration management and interoperability challenge for the RS JPO. Although close to 6,000 systems have been fielded since 2003, the warfighter still needs a vendor-specific operator-control unit to interface with any given robot. A key tenet of RS JPO's strategic vision is the development, application and certification of a set of interface specifications and open architecture standards that will enable interoperability, payload integration and product improvement. RS JPO, serving as the system integrator of all payloads on any robotic platform, is responsible for managing space, weight and power trades. The definition of a systronic payload interface (one that defines the mechanical, electrical, communication and systematic interfaces) allows the PM to prescribe a configuration management process. This will drive the PM to a family of robotic platforms with a common set of payload, communication and command-and-control interface standards. The benefits of this discipline are plug-and-play mission payloads, common controllers and true modularity of systems.

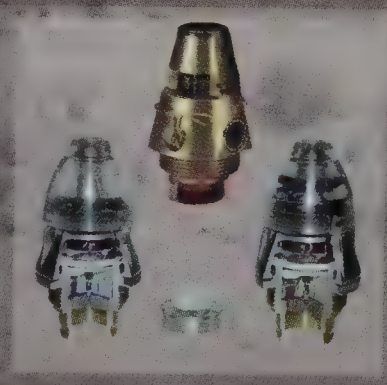
As the attention of U.S. military forces has shifted from Iraq to Afghanistan, the RS JPO anticipates additional requirements and new applications for ground robots. Fighting in Operation Enduring Freedom (OEF) is significantly different from that in Iraq. Unlike in Iraq, the transportation, communication and utility infrastructures are rugged mountain trails and mud huts. In Afghanistan, smaller, lighter robots with increased agility and mobility will be needed by infantry units and maneuver elements hiking the high-altitude trails. Certainly, more EOD and route-clearance robots will be needed with the build-up of force. Hazardous material and explosives detection sensors, high-resolution cameras, dextrous manipulators and other payloads will be required to enhance warfighter capability in OEF. The RS JPO is poised to meet the emerging ground robotic requirements for OEF. Modernization and standardization of veteran assets from Iraq will occur during a process called reset. Reset and new procurements will facilitate the transformation to the Future Force. Regardless of how robots are integrated into the heavy, Infantry or Army modernization brigade combat teams, interoperability and modular payloads are two sure things. Another certainty is that this capability can be delivered to the warfighter only through collaboration between the RS JPO and its partners. The RS JPO is committed to building strategic and tactical relationships to support the joint warfighter in the life-cycle management of unmanned systems.

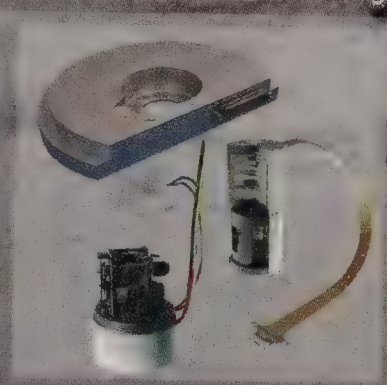
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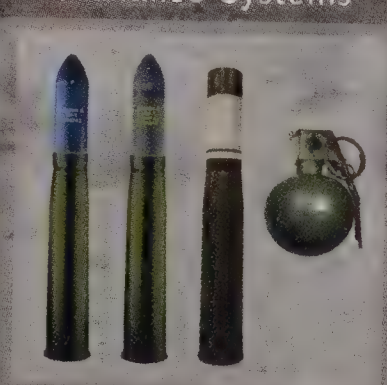


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COMBAT SUPPORT AND COMBAT SERVICE SUPPORT

Under the Program Executive Office for Combat Support & Combat Service Support (PEO CS&CSS), project managers, together with their reporting product managers and product directors, are responsible for Army systems and some joint service programs across all phases of their life cycle.

Program phases fall into the areas of: pre-systems acquisition (concept refinement or technology development), generally consisting of R&D programs and prior to a Milestone B; systems acquisition (between Milestone B and full materiel release); systems after full materiel release (in production and fielding phases); and two types of sustainment (operations & support): systems that have completed fielding, are no longer in production and are managed directly by the PM and systems that have completed fielding, are no longer in production and are managed by an AMC commodity command, but for which the PM is the life-cycle manager.

PEO CS&CSS Project Managers include Project Manager Joint Combat Support Systems, Project Manager Force Projection and Project Manager Tactical Vehicles. A representative sampling of their programs follows.

The office of Project Manager Joint Combat Support Systems (PM JCSS), for example, includes both the Product Manager Joint Light Tactical Vehicles (PM JLTV) and Product Manager Sets, Kits, Outfits and Tools (PM SKOT), as well as Product Director Test, Measurement and Diagnostic Equipment (PD TMDE) and Product Director Horizontal Technology Insertion (PD HTI).

Product Manager Joint Light Tactical Vehicles (PM JLTV) is responsible for the Army's participation in the **Joint Light Tactical Vehicle (JLTV).** The Army is the lead service in the joint Army/Marine Corps program, which consists of a family of vehicles (FoV) with companion trailers capable of performing multiple mission roles that will be designed to provide protected, sustained, networked mobility for personnel and payloads across the full range of military operations (traditional to irregular).

JLTV has been approved at Milestone A and is currently in the technology development phase. Industry proposals were submitted in mid-April 2008 for evaluation by the Source Selection Evaluation Board.

Product Manager Sets, Kits, Outfits and Tools responsibilities include diving equipment, sets, kits and outfits (stand-alone, shelter-mounted and mobile), and shop sets/support equipment.

Product Director Test, Measurement and Diagnostic Equipment (PD TMDE) is responsible for calibration sets (CALSETS), integrated family of test equipment (IFTE) at-platform automatic test systems (AP-ATS) and off-platform automatic test sets (OPATS), and test equipment modernization (TEMOD).



Joint EOD rapid response vehicle (JERRV)

The Product Director Horizontal Technology Insertion (PD HTI) is responsible for the Army's **Expedited Modernization Initiative Procedure (EMIP).** As a "process" rather than a "product," EMIP represents a multiphased and continuous market research process. EMIP is primarily intended to suggest improvements to the current and future fleet of CS&CSS vehicles and other systems. The process seeks to identify industry's investments in proven, advanced, commercial technologies at the component and subsystem levels, at a technology readiness level 7 or better, with the goal of EMIP to educate government representatives about these technologies. Information developed as part of this market research will be shared within the PEO CS&CSS, other program executive offices and other services.

The **Project Manager Force Projection (PM FP)** encompasses Product Manager Assured Mobility Systems (PM AMS), Product Director Army Watercraft Systems (PD AWS), Product Manager Bridging, Product Manager Combat Engineer/Material Handling Equipment (PM CE/MHE), Product Manager Force Sustainment Systems (PM FSS), and Product Manager Petroleum and Water Systems (PM PAWS).

The **Product Manager Assured Mobility Systems (PM AMS)** is responsible for mine protected route clearance vehicles like the Buffalo mine protected clearance vehicle, joint EOD rapid response vehicle (JERRV), medium mine protected vehicle (RG-31), vehicle mounted mine detector (VMMD) and medium mine protected vehicle (MMPV) program of record.

The **Buffalo Mine Protected Clearance Vehicle,** for example, is a six-wheeled vehicle specifically designed to withstand encounters with mines/IEDs while pro-



The Buffalo mine protected clearance vehicle (MPCV)

tecting up to six soldiers inside. The Buffalo is used by engineer units during area and route clearance operations. It is blast-protected up to 30 pounds TNT for each wheel and 15 pounds TNT along the centerline. Armor provides ballistic protection against 7.62 mm ball. It has an arm that enables the operator to safely investigate suspicious locations.

Another representative example is the **Medium Mine Protected Vehicle (RG-31 MK3).** The RG-31 MK3 APC is a four-wheel drive, armored personnel carrier intended for on- and off-road use. The vehicle is designed and constructed to protect occupants from small-arms fire and anti-tank mine detonations. Access to the vehicle is via a rear door. The vehicle is powered by a turbocharged six-cylinder, in-line, water-cooled diesel engine. The engine is directly coupled to an automatic gearbox, which is coupled directly to a transfer gearbox, with propeller shafts to the front and rear driving axles. The vehicle is equipped with conventional suspension but has sufficient ground clearance to negotiate rough roads and obstacles.

Product Director Army Watercraft Systems (PD AWS)

With an understated motto of "Sail Army," the U.S. Army Program Manager for Army Watercraft Systems (PM AWS) is working to provide "a flexible and responsive fleet, projecting and sustaining America's forces through the 21st century." Responsibilities include the engineering, production, fielding, initial logistics support and modernization/modification of the U.S. Army fleet of watercraft and associated support equipment, which enable the warfighter to rapidly project the nation's armed forces.

The **Containerized Maintenance Facility (CMF)** is a transportable maintenance complex that is made up of a combination of five tactical rigid-wall expandable International Standards Organization (ISO) shelters and two ISO containers. The system is designed to be stand-alone and is equipped to provide intermediate support for deployment and sustainment of the full spectrum of Army watercraft in either a fixed port or joint logistics over-the-shore environment.

The **Large Tug (LT) 128'** is used for transocean/coastal towing operations and for assisting with the docking/undocking of large ships. The LT 128' is outfitted to provide salvage, rescue and firefighting assistance to other vessels and shore installations on a limited basis.

The **Landing Craft Utility (LCU) 2000** provides worldwide transport of combat vehicles and sustainment cargo. It also supports intratheater and tactical resupply.

The **Landing Craft Mechanized (LCM8)** is used in lighter and utility work. The Mod 2 program enhances vessel capabilities including command and control, personnel transfer and light salvage.

The **Theater Support Vessel (TSV)-Interim** is a critical step toward the definition and acquisition of the future TSV. There was a fiscal year 2001 contract award for an Army/Navy joint lease of HSV-X1 (*Joint Venture*) high-speed vessel. Together with TSV-1X (*Spearhead*), the platforms are part of a TSV interim program/investigations/experimentation and Office of the Secretary of Defense-approved advanced concepts technology demonstration.

The **Modular Causeway System** provides a means to move cargo from ship to shore across unimproved beaches in areas of the world where fixed port facilities are unavailable, denied or otherwise unacceptable.

The sections are made up of modular, ISO compatible modules. The four systems are configured from basic modules in various configurations: roll-on/roll-off discharge facility; causeway ferry; floating causeway (FC); and warping tug.

The **Command, Control, Communications, Computers and Intelligence (C^4I) Installation Package** provides state-of-the-art communication (secure/nonsecure) equipment, navigational equipment and safety of life at sea electronics.

The **Barge Derrick (BD) Crane 115 Ton** is used primarily in discharging heavy loads beyond the capacity of the ship's gear and assisting in salvage operations. The crane provides the lift and reach needed to discharge the heaviest of the projected Army cargo—the M1A2 main battle tank—from the centerline of the large, medium speed roll-on, roll-off (LMSR) ships.

The **Logistics Support Vessel (LSV)** provides worldwide transportation of combat vehicles and sustainment cargo. The 313-foot LSV class vessel, designed to carry more than 2,000 tons of deck cargo, has a beam of 60 feet and a molded depth of 19 feet. It provides intratheater movement to remote underdeveloped coastlines and inland waterways. The LSV is the primary logistics over-the-shore (LOTS)/JLOTS vessel. It also assists in unit deployment and relocation.

The **900 Class Small Tug** mission is moving logistical supplies and equipment in harbor and inland waterways. The small tug also provides the capability to assist larger tugs in docking and undocking all types of ships and watercraft and can be used in routine harbor utility work.

Future Army Watercraft Systems

Army future watercraft programs include Theater Support Vessel (TSV)-Objective, rapidly installed breakwater system, Harbormaster command-and-control center and vessel bridge simulator.

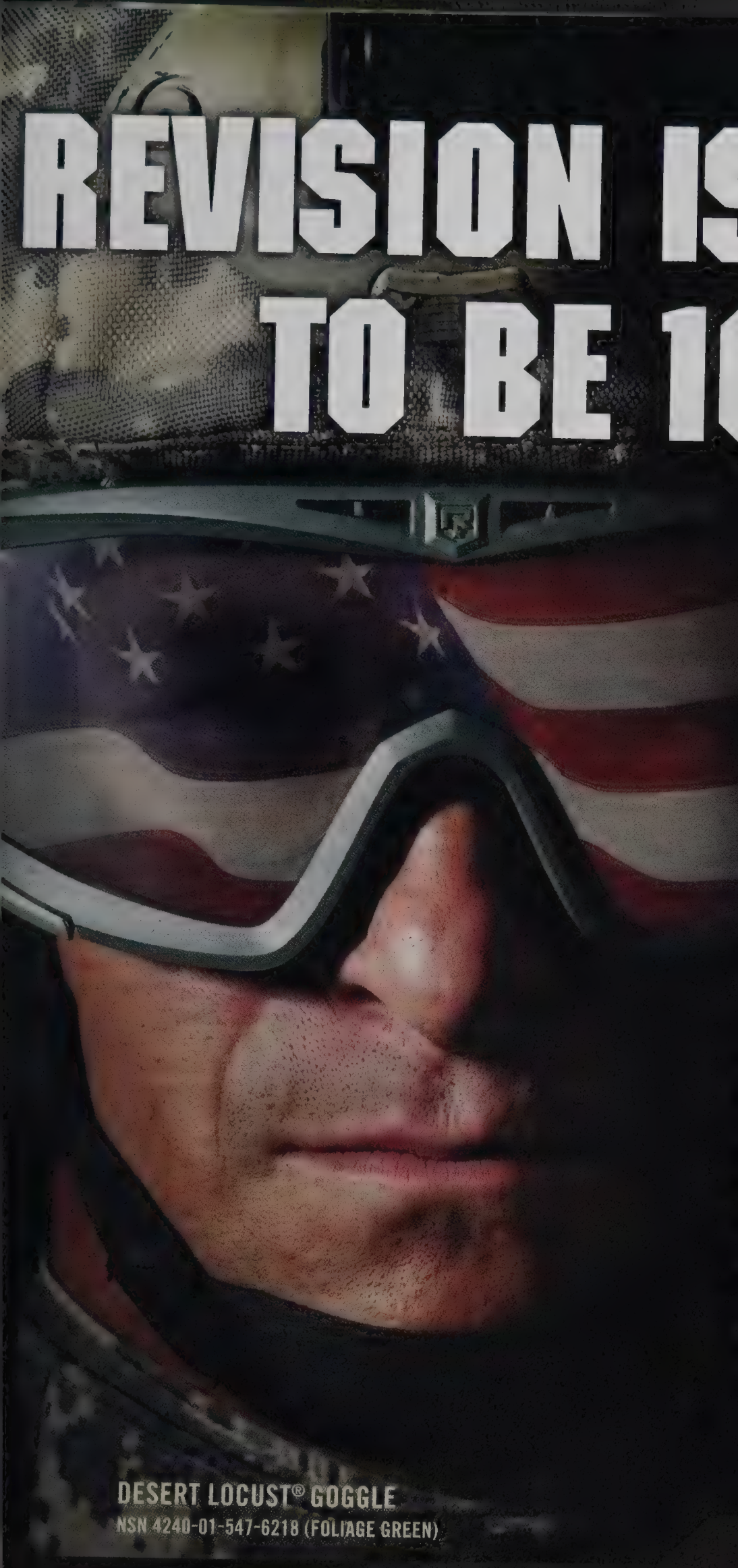
The **Theater Support Vessel (TSV)-Objective** will provide high-speed intratheater transport of troops and cargo and represents the next-generation Army watercraft to support the Army's doctrinal intratheater lift mission.

Using commercial off-the-shelf technology, it will deploy to the theater of operations at speeds greater than 40 knots through sea state 5+ (winds of 21 knots or greater), while being capable of transport-



Logistics support vessel (LSV)

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Dry support bridge (DSB)

ing more than 350 soldiers plus gear and up to 1,250 short tons of cargo.

Capable of operational maneuver from standoff distances and into five times as many ports, the TSV will provide rapid, intratheater lift for ready-to-fight combat forces together with their equipment. As a result, the TSV will minimize the need for large-scale reception, staging, onward movement and integration of soldiers, vehicles and equipment within the battlespace. It offers the joint force commander a multimodal and multipurpose platform to support joint operations that complement C-17 and C-130 airlift capabilities. Advantages of the TSV-Objective include: operational movement and repositioning; personnel and equipment moving together; en route mission planning and rehearsal; reduced AO LOG infrastructure; ability to bypass theater choke points; access to austere shallow draft ports; ability to perform multiple point entry; offset airlift shortages; and reduction of asymmetric threats.

The **Rapidly Installed Breakwater System (RIBS)** is a logistics over-the-shore (LOTS) enabler used in all phases of force projection including early entry and follow-on sustainment. The RIBS augments existing port facilities to enable greater throughput of equipment and supplies. The RIBS is designed to support discharge or retrograde LOTS operations by reducing sea state 3 conditions to sea state 2 or below.

The **Harbormaster Command and Control Center (HCCC)** will provide 24-hour real-time vessel tracking, in-transit visibility, movement tracking, full joint interoperability, secure and nonsecure communications, and real-time meteorological and bathymetric data. It will be fully digitized to support the Future Force of the 21st century.

The **Vessel Bridge Simulator** will provide the mariner an advanced, interactive, full mission trainer that uses state-of-the-art computer-generated imagery. This trainer will replicate all Army watercraft and include vessel maneuvering and navigation as well as rehearsing missions in worldwide seaports to prepare for real-world deployments in any weather or lighting conditions.

Product Manager Bridging

Product Manager Bridging interfaces with other defense organizations on a range of existing and emerging bridging systems including the Armored Vehicle Launched Bridge (AVLB), Improved Ribbon Bridge (IRB), Standard Ribbon Bridge (SRB), MK II-S Bridge Erection Boat Service Life Extension Program, Common Bridge Transporter (HEMTT), Rapidly Emplaced Bridge System (REBS), M18 Dry Support Bridge (DSB) System, M3 Medium Girder Bridge (MGB), Joint Assault Bridge (JAB), Assault Breacher Vehicle (ABV), Bailey Bridge, Improved Boat Cradle (IBC), Bridge Adapter Pallet (BAP) and Maybey Johnson Bridge.

The M18 Dry Support Bridge (DSB) System and the Improved Ribbon Bridge (IRB) provide representative examples.

The **M18 Dry Support Bridge (DSB)** provides the Army with assault and support bridging for gaps of up to 40 meters. The DSB replaces the outdated, manpower- and time-intensive medium girder bridge (MGB) with a mechanical system capable of emplacing a 40-meter bridge with 14 soldiers in 90 minutes or less. In addition, the DSB will improve current bridge load-carrying capacity, moving it up to military load classification (MLC) 96 for wheeled traffic, such as an M1 tank uploaded on a heavy equipment transporter. The DSB is designed for transportation as a palletized load by the CBT, PLS trailers or by service support units equipped with PLS trucks.

The **Improved Ribbon Bridge (IRB)**, which was fielded beginning in 2004, improves mobility by providing a continuous roadway or raft capable of crossing MLC 96 (wheeled)/80 (tracked) vehicles over nonfordable wet gaps.

The product office also has responsibility for the **M9 Armored Combat Earthmover (ACE),** a highly mobile armored vehicle capable of performing mobility, countermobility and survivability tasks in support of light, medium or heavy forces on the integrated battlefield. First fielded in 1986, this multipurpose engineer vehicle provides the operator with armor protection for operation in the forward portion of the combat area. By raising the dozer blade and using its scraper blade, the M9 ACE can fill itself with ballast to improve dozing efficiency.

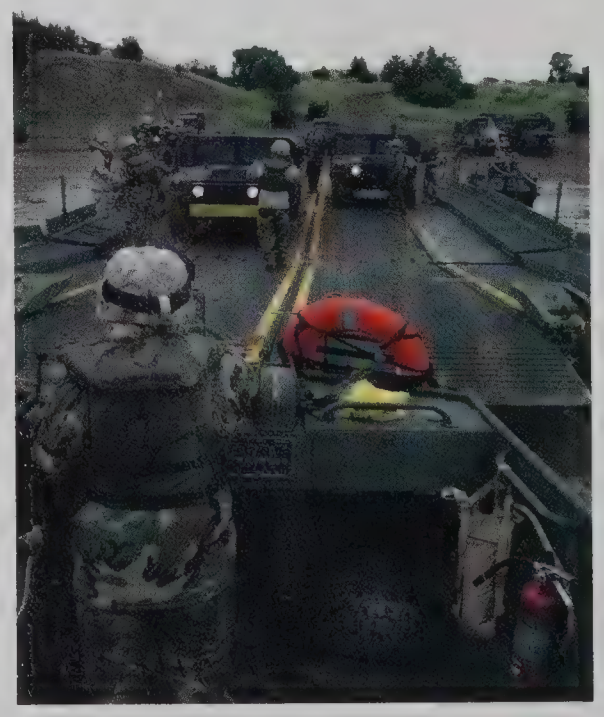
The Product Manager Combat Engineer/Material Handling Equipment (PM CE/MHE) coordinates and supports a wide range of compactors and rollers, construction plants and equipment, container handlers, cranes, dozers and combat earthmovers, excavators, forklifts, graders and scrapers, loaders and sectionalized equipment.

Program examples include systems like the High-Mobility Engineer Excavator and Engineer Mission Modules.

The **High-Mobility Engineer Excavator (HMEE)** replaces the small emplacement excavator (SEE), whose life cycle ended in FY 2005. Current plans are to replace the SEE with Type I (heavy) and Type II (light) vehicles for heavy and medium/light engineer units.

The **Interim High-Mobility Engineer Excavator (IHMEE)** is a self-deployable excavator system that fills the immediate and critical excavation needs of the Stryker brigades.

With its attachments, the IHMEE is capable of executing a variety of mobility,



Improved ribbon bridge (IRB)



survivability and countermobility missions, maintaining convoy speed, performing rapid excavation tasks and quickly self-deploying to the next mission site.

Weighing approximately 24,000 pounds, it can attain speeds exceeding 50 mph. The IHMEE can be transported by the C-130 and is one of two engineering construction systems in the Stryker brigade. The system chosen to fill this need is ADI's high-speed engineer vehicle. Up to 62 IHMEEs are being procured to support all Stryker brigades. The IHMEE began fielding to the Stryker brigades in the third quarter of FY 2003.

Another recently emerging activity with a broad range of engineering applications involves the development of **Engineer Mission Modules**. Permanently mounted on standard logistics flatracks, the modules are loaded via truck load-handling equipment, which allows drivers to configure their systems for a specific mission.

By using fewer trucks and more modules, the concept provides a cost-effective means of modernizing the fleet of engineer construction equipment. PLS flatrack configurations in production include the M5 bituminous distributor, which has a capacity of 2,800 gallons; the M6 concrete module mixer, which has a capacity of 5 cubic yards when used on the PLS truck or trailer and 8 cubic yards when used on the ground as a batch plant; and the M6 dump body, which has a capacity of 12 to 14 cubic yards. Currently under development are the XM9 2,000-gallon water distributor for use with the HEMTT-LHS truck and the XM10 3,000-gallon water distributor for use with the PLS truck.

Other modules being considered include a fuel module, a well-drilling system and a chemical decontamination unit.

PM Force Sustainment Systems

The Product Manager Force Sustainment Systems (PM FSS) coordinates aerial delivery equipment, containerized systems, field feeding systems, field services products, force provider, heaters and environmental control, shelter systems and camouflage.

The **Joint Precision Air Drop System (JPADS),** for example, is a family of systems—Joint Precision Air Drop System 2,400 pounds (JPADS 2K), Joint Precision Air Drop System 10,000 pounds (JPADS 10K) and Joint Precision Air Drop System 30,000 pounds (JPADS 30K)—that will allow conventional military aircraft to accurately drop sensors, munitions, and/or a huge range of supplies onto the battlefield while minimizing the risk to aircraft and the possibility of enemy detection of aircraft drop zones. The systems will use gliding parachute decelerators, GPS-based guidance, navigation and control, weather data assimilation and an air drop mission planning tool to deliver cargo with near pinpoint accuracy. The first combat JPADS cargo air drop took place at the end of August 2006.

An example of recently fielded shelter systems can be found in the **Soldier Crew Tent (SCT).** Originally developed to provide environmental protection for the billeting of combat vehicle crews, the SCT is a lightweight, durable, single frame, single hub tent. The tent body is suspended from the frame in a canopy style. An over-cover lies on top of the frame to provide an air gap for added insulation. Two reversible over-covers are available in either a green/tan or green/white configuration. A cold weather cotton liner is also provided. The SCT is 53 inches high, weighs 75 pounds, and houses five soldiers in 120 square feet of floor space. Erect/strike is accomplished in less than five minutes. A mesh gear loft for storage is suspended over the sleeping area. A storage/transport cover is included as well as a field repair kit. A 4-inch stovepipe opening is included for use with a standard military heater.

The Product Manager Petroleum and Water Systems (PM PAWS) is responsible for a range of petroleum laboratories, petroleum storage and distribution systems, water purification and treatment systems, and water storage and distribution systems.

Offices within the Project Manager Tactical Vehicles (PM TV) include: Product Manager Light Tactical Vehicles (PM LTV), Product Manager Medium Tactical Vehicles (PM MTV) and Product Manager Heavy Tactical Vehicles (PM HTV).

The Product Manager Light Tactical Vehicles (PM LTV) is responsible for the Army's High-Mobility, Multipurpose Wheeled Vehicles (Humvee) family and light tactical trailers (LTT).

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Humvee



The versatile **High-Mobility, Multipurpose Wheeled Vehicle (Humvee)** provides a common, light tactical vehicle capability. The Humvee is the Army's primary light wheeled vehicle for combat support and combat service support missions. The Humvee replaced the quarter-ton jeep, M718A1 ambulance, half-ton Mule, 1.25-ton Gamma Goat and M792 ambulance when it began fielding in 1985. Humvees of all variants (including most up-armored Humvees) are currently deployed in support of operations in Iraq and Afghanistan.

The Humvee family of vehicles consists of multiple configurations built on a common chassis to support weapon systems, command-and-control systems and field ambulances, and to provide ammunition, troop and general cargo transport. It is equipped with a high-performance diesel engine, automatic transmission and four-wheel drive. It is air transportable and low-velocity air drop (LVAD) certified (except for the maxi ambulance variants). The Humvee can be equipped with a self-recovery hydraulic winch capable of up to 10,500-pound 1:1 ratio line pull capacity, and it can support payloads from 2,500 to 5,100 pounds (including crew and pintle loads), depending on the model.

The A1 model, which entered production in 1992, introduced upgraded driveline components, heavy-duty rear springs, an improved brake system, a high-ratio transfer and 2.73:1 front and rear differentials.

The subsequent introduction of the A2 configuration brought with it a new 6.5-liter, naturally aspirated diesel engine; an electronically controlled, four-speed automatic transmission; and a redesigned emissions system that met 1995 U.S. Environmental Protection Agency standards. Other features focused on user comfort, vehicle maintainability and performance.

Further expansion of Humvee payload capacity has led to the development and introduction of the expanded capacity vehicle (ECV), M1113 and the M1114 up-armor Humvee (UAH). The ECV was produced in 1995 as a shelter carrier providing up to 5,100 pounds of payload. The M1114 UAH configuration provides protection for the driver and three crew members from small-arms fire, overhead fragmentation from artillery and mortar shells and underbody from antipersonnel/antitank mines. It has a rooftop weapon station which can accommodate an M60 machine gun, M2 machine gun, Mk 19 grenade launcher or the M240/M249 weapon. Kits are available to enhance internal survivability for the crew and gunner.

The newest variants of the Humvee family include the M1151, M1152 and M1165 series vehicles. Unlike some earlier models, the latest versions are designed for the application of additional armor packages over their base protection levels.

The **Light Tactical Trailer (LTT)** is the Humvee trailer. It has been tested and approved (materiel released) for use in accordance with the Humvee mission profile.

The LTT comes in three variants: M1101 (LTT-L), M1102 (LLT-H) and heavy chassis (LTT-HC).

Product Manager Family of Medium Tactical Vehicles

The Product Manager Medium Tactical Vehicles (PM MTV) is responsible for the **Family of Medium Tactical Vehicles (FMTV),** including light medium tactical vehicles (LMTV), medium tactical vehicles, FMTV specialty vehicles and FMTV trailers.

The medium truck fleet has historically accounted for more than half of the Army's single-lift payload capacity. In redefining this vital fleet, Army planners took the opportunity to focus on a family approach; that is, to combine both 2.5-ton and 5-ton payload classes into a single acquisition program that would yield a logistically significant degree of component commonality across all medium fleet variants.

The Army's requirement for medium trucks is now more than 83,000 vehicles. These vehicles are required across the entire spectrum of combat, combat support and combat service support units. They must perform roles such as unit mobility, field feeding, water distribution, local and line-haul transportation, maintenance platforms, engineer operations, communication systems, medical support and towing artillery pieces. All medium vehicles must be capable of operating worldwide on primary and secondary roads, as well as on trails, and cross-country in weather extremes from minus 50 to 120 degrees Fahrenheit.

The FMTV achieves extraordinary commonality by sharing many subsystems and components in the 4x4 (LMTV), 6x6 (MTV) and companion trailer configurations. The trucks share, for example, common engine assemblies (with different horsepower ratings), cooling systems, transmissions, intake and exhaust systems, front axles and suspension systems, tires and wheels, cab assembly, vehicle control gauges, self-recovery winches and much more. They differ primarily in number of axles (two versus three) and standard cargo bed size (12 feet versus 14 feet) to accommodate different payload ratings (2.5 tons versus 5 tons) and body styles.

The FMTV deviates from predecessor vehicle designs by having its tilt cab over the engine. This design approach contributes to the Army's goal of significantly improving the deployability of units, since a typical FMTV vehicle is some 40 inches shorter than the vehicle it replaces, requiring less space aboard deploying aircraft or surface shipping. This reduced length also contributes to a shorter turning radius and better off-road mobility. Off-road mobility is further enhanced by a standard central tire inflation system (CTIS) and state-of-the-art suspension.

LMTV systems include the M1078/A1 2.5-ton standard cargo, M1079/A1 2.5-ton van, M1080/A1 2.5-ton chassis, and M1081 2.5-ton standard cargo (LVAD) [low-velocity air drop capable].

MTV systems include the M1083/A1 5-ton standard cargo, M1084/A1 5-ton standard cargo with MHE, M1085/A1 5-ton long cargo, M1086/A1 5-ton long cargo



with MHE (crane), M1088/A1 5-ton tractor, M1089/A1 5-ton wrecker, M1090/A1 5-ton dump, M1092/A1 5-ton chassis, M1093 5-ton standard cargo (LVAD), M1094 5-ton dump (LVAD) and M1096/A1 5-ton long chassis.

FMTV special vehicles include the M-1087A1 expandable van, XM1140 high-mobility artillery rocket system (HIMARS) carrier, XM1147 FMTV load handling system (LHS) trailer, XM1148 FMTV LHS truck, XM1157 10-ton dump and XM 1160 medium extended air defense system (MEADS) carrier.

FMTV trailers include the M1082 trailer cargo 2.5 ton and M1095 trailer cargo 5 ton.

In addition, the office helps coordinate activities on M900 series 5-ton trucks, as well as the M200 and M1061 special cargo trailers.

The Product Manager Heavy Tactical Vehicles (PM HTV) addresses programs including the heavy equipment transporter system, heavy expanded mobility tactical truck, palletized load system, flatracks, container handling and mission modules, M915 family of vehicles, fifth wheel trailers and special trailers.

The M1070/M1000 **Heavy Equipment Transporter System (HETS)** deploys, transports, recovers and evacuates combat-loaded M1 tanks and other vehicles of

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Heavy expanded mobility tactical truck (HEMTT)

similar weight to and from the battlefield. More than 2,300 have been deployed in Operation Iraqi Freedom. The M1070 tractor and M1000 semitrailer replace the M911/M747 as the Army's latest model HETS.

The M1070/M1000 HETS was developed to accommodate the increased weight of the M1 Abrams family of main battle tanks. The M1070 provides line-haul, local-haul and maintenance evacuation on and off the road during tactical operations worldwide. Unlike previous HETS, the M1070 is designed to carry both the tank and its crew. Approximately 2,311 HETS have been fielded to date. Development design of full up-armored cabs for the HEMTT, PLS and HETS tractor is in progress.

The **Heavy Expanded Mobility Tactical Truck (HEMTT)** is the workhorse of Army combat divisions. C-130 transportable, it is the key combat service support enabler for the Stryker brigade combat team. The 11-ton, eight-wheel drive family of vehicles is designed to operate in any climatic condition.

There are six basic configurations of the HEMTT-series trucks: the M977 cargo truck; M985 cargo truck with materiel-handling crane; the M978 2,500-gallon fuel tanker; the M983 tractor; the M984 wrecker; and the M1120 load-handling system (LHS). The HEMTT is used as a prime mover for the Patriot missile system, M7 forward repair system and tactical water purification system and as the chassis for the M1977 common bridge transporter, M11428 tactical firefighting truck and XM1158 HEMTT-based water tender. The HEMTT is also compatible with the PLS trailer. A self-recovery winch is available on all models. An electronic controller for the engine and a new electronic transmission were put into production in April 2002.

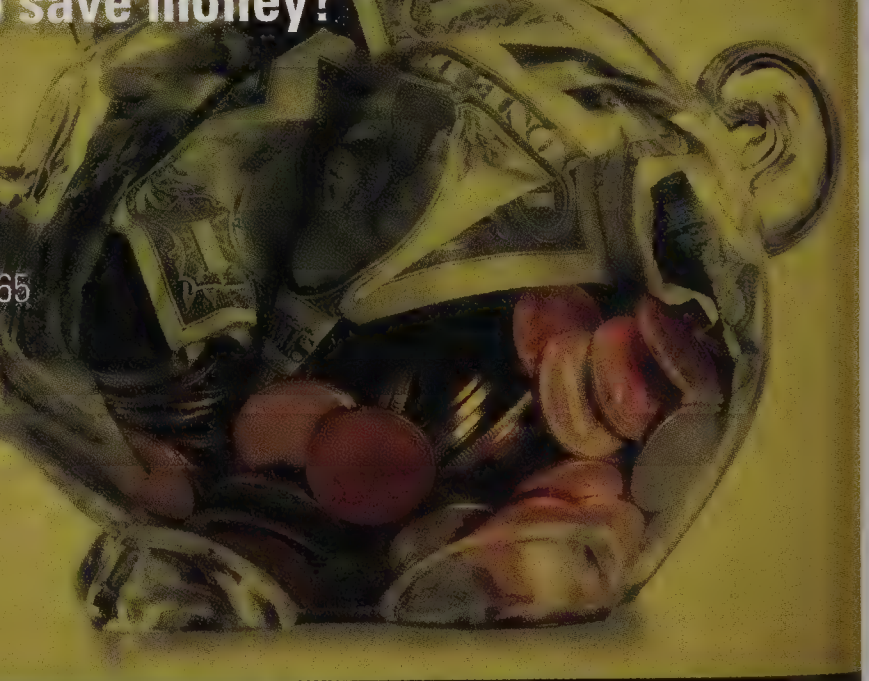
The HEMTT is augmented by the M989-A1 heavy expanded munitions ammunition trailer (HEMAT) in the transport of multiple-launch rocket system family of munitions (MFOM). The HEMAT can transport four MFOM pods, each weighing approximately 5,400 pounds. The off-road capability of the HEMTT and HEMAT combination can transport eight MFOM pods. The M989A1 HEMAT is also required to trans-

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Palletized load system (PLS)

port six standard ammunition pallets (single stacked), two 600-gallon fuel pods or two 500-gallon fuel bladders.

Approximately 13,000 HEMTTs have been fielded to date. Of the total fleet size, approximately 2,150 are currently in OIF. HEMTT production is funded through fiscal year (FY) 2011.

The HEMTT was designated as one of the 10 original Army life-cycle pilot programs under Section 912c of the FY 1998 National Defense Authorization Act, intended to demonstrate reduced life-cycle costs through greater innovation throughout the product's life cycle. The Army approved the HEMTT recap program baseline in October 2001. The goal of recapitalization is the insertion of modern commercial technology to reduce operational and support costs, increase fleet readiness and meet regulatory requirements. As the benefits of these improvements are verified, they were phased into production and recap vehicles. The HEMTT recap program will recapitalize HEMTT vehicles to 0 miles/0 hours and to the A2 configuration, which consists of bumper-to-bumper recap of the entire truck with the following technology insertions: electronic engine, electronic transmission, air-ride seats, four-point seatbelts, bolt-together wheels, increased corrosion protection and an enhanced electrical package. The HEMTT recap program is also capable of converting excess M977 cargo versions into M1120 HEMTT-LHS versions to address current shortfalls. The HEMTT recap program is currently funded through FY 2020.

HEMTT A3 is an advanced technology insertion into the HEMTT vehicle that is under evaluation to optimize compatibility with C-130 aircraft capabilities and constraints.

Current HEMTT programs and activities include: M977/M985 HEMTT cargo truck, with materiel-handling crane, M978 HEMTT fuel tanker, 2500-gallon M983 HEMTT tractor, M984 HEMTT wrecker, M1120 HEMTT load handling system (LHS) (mounts on standard M977/M978 or M985 chassis), M1977 common bridge transporter (CBT), tactical firefighting truck (TFFT), HEMTT recapitalization program and HEMTT A3.

The **Palletized Load System (PLS)** is the primary component of the maneuver-oriented ammunition distribution system. Roughly 1,000 PLSs are being used in OIF. It also performs local-haul, line-haul, unit resupply and other transportation missions in the tactical environment. In addition, it is used as the prime mover for the M7 forward repair system and various engineer mission modules (M917 dump truck, M918 bituminous spreader and M919 concrete mixer). The PLS is also the host chassis for the dry support bridge launcher vehicle (M1975).

The PLS consists of a 16.5-ton payload tactical truck with a flatrack. It is a five-axle, 10-wheel drive vehicle with a 500-hp Detroit Diesel engine, an Allison automatic transmission and a CTIS. This combination provides a highly mobile system able to transport its payload in virtually any type of terrain or weather and maintain pace with the self-propelled artillery systems that it supports. The PLS comes in two mission-oriented configurations: the M1074 and the M1075.

The M1074 is equipped with a variable-reach materiel-handling crane (MHC) to support forward-deployed field artillery units. The M1075, without MHC, is used in conjunction with the M1076 trailer to support transportation line-haul missions. Of the 3,500 PLS trucks that have been fielded to date, approximately 1,000 are in OIF.

The M1076 PLS trailer is a three-axle,

ARCIC/AUSA Writing Contest

Winner

The Army Capabilities Integration Center (ARCIC) and AUSA's Institute of Land Warfare are proud to announce the winner of their 2009 writing contest:

Proactive Self-Defense in Cyberspace
by Colonel Bruce D. Caulkins, USA

(published by AUSA as Land Warfare Paper 73, August 2009, available online at http://www.ausa.org/publications/ilw)

For more information, visit www.arcic.army.mil

wagon-style trailer with a 16.5-ton payload capacity that is equipped with a flatrack that is interchangeable between truck and trailer. The combination of truck and trailer provides the combined payload capacity of 33 tons. The flatracks are lifted on and off the truck and trailer by a hydraulic-powered arm mounted on the truck, eliminating the need for additional materiel-handling equipment. The controls for the arm are located inside the cab, allowing the operator to load or unload the truck in less than one minute without leaving the cab of the truck. The trailer can be loaded or unloaded in less than five minutes using the remote-control arm.

The PLS can transport multiple cargo configurations by using a variety of flatracks. The M1077 and M1077A1 flatracks are sideless and used to transport pallets of ammunition and other classes of supplies. The M1 flatrack carries identical classes of supplies. It is ISO/CSC certified and suitable for intermodal transport, including transport on container ships.

Ammunition can be loaded on the M1 at depots, transported via container ship to theater, picked up by the PLS truck and carried forward without using any materiel-handling equipment. The walls fold inward when empty to facilitate stacking for retrograde. The M3/M3A1 container roll-in/out platform is a flatrack that fits inside a 20-foot ISO container. The container-handling unit is a kit installed on the PLS that allows the direct load, transport and unload of 20-foot ISO containers without an external flatrack.

Association of the United States Army 2010 Calendar of Events

All dates and locations are tentative and subject to change.

January 5 – 7	AUSA's ILW Army Aviation Symposium & Exposition Hyatt Regency Crystal City Arlington, VA
February 24 – 26	AUSA's ILW Winter Symposium & Exposition Greater Fort Lauderdale/Broward County Convention Center Fort Lauderdale, FL
March 29 – April 1	AUSA's ILW Army Installations Symposium & Exposition JW Marriott San Antonio Hill Country San Antonio, TX
May 10 – 13	SOFEX 2010 Special Operations Forces Exhibition and Conference King Abdullah I Airbase Amman, Jordan
May 17 – 20	AUSA's ILW Army Medical Symposium & Exposition Henry B. Gonzalez Convention Center San Antonio, TX
June 14 – 18	Eurosatory Paris-Nord Villepinte Paris, France
June 22 – 24	AUSA's ILW Army Logistics Symposium & Exposition Greater Richmond Convention Center Richmond, VA
July 20 – 22	AUSA's ILW Army Fires Symposium and Exposition Fort Worth Convention Center Fort Worth, TX
October 25 – 27	AUSA Annual Meeting & Exposition Walter E. Washington Convention Center Washington, DC

The M915 Family of Vehicles

The Army's **M915-Series Line-Haul Tractors** operate on highways and secondary roads to transport bulk supplies and fuel to U.S. forces. The Army's line-haul fleet consists of the M915, M915A1, M915A2, M915A3 and M915A4 vehicles. The latter three are based upon Freightliner's commercial FLD120 tractors and incorporate transport industry technologies for safety, fuel efficiency and low operating costs per mile.

The M915-series fleet of vehicles is found primarily in active and reserve component transportation units that are responsible for the rapid, efficient transport of bulk supplies from ocean ports to division support areas within a theater of operation.

They are used primarily to transport the M871 semitrailer (flatbed, 22.5 tons), M872 semitrailer (flatbed, 34 tons), M967/M969 semitrailer (5,000-gallon tanker) and M1062 semitrailer (7,500-gallon tanker). The M915-series has a maximum gross combined vehicle weight of 105,000 pounds when operating with the M872 semitrailer.

Current program activities include: M915A3 tractor, line haul, M915A4 tractor, line haul upgrade (glider), M916A3 truck tractor, light equipment transport, M917A2 dump truck 20-ton, and M915 logistics handling system.

The Product Director Armored Security Vehicle (PD ASV) has the mission to develop, produce, field and sustain the **M1117 Armored Security Vehicle** to an expeditionary force.

The M1117 ASV is a turreted, armored, all-wheel drive vehicle that supports military police missions—such as rear area security, law and order operations, convoy protection, battlefield circulation and enemy prisoner of war operations—over the entire spectrum of war and operations other than war.

The ASV provides protection to the crew compartment, gunner's station and the ammunition storage area. The turret is fully enclosed, with both an MK-19 40 mm grenade machine gun and a .50-caliber machine gun, and a multisalvo smoke grenade launcher. The ASV provides ballistic, blast and overhead protection for its four-person crew. With a payload of 3,600 pounds, its 400 miles-plus range, top speed of nearly 70 miles per hour and C-130 deployability ensure its value to the warfighter.

In addition, on the ASV chassis, the U.S. Army is developing the M1200 Armored Knight to provide improved survivability over the current M707 Knight (Humvee-based Knight). Used by U.S. Army field ar-



M1117 armored security vehicle

tillery combat observation lasing teams (COLTs) in both heavy and Infantry brigade combat teams, the Armored Knight will combine the proven armored security vehicle with the M707 Knight mission equipment package.

The resultant M1200 Armored Knight will provide COLTs with increased armor protection, payload and agility. Textron Marine and Land Systems is presently under contract with the U.S. Army for 107 modified ASVs to be used as the base vehicle for the M1200 Armored Knight production.

AMMUNITION

The Program Executive Office for Ammunition (PEO Ammo) has the mission to develop and procure conventional leap-ahead munitions to increase combat power to warfighters. Project managers within the PEO include: Combat Ammunition Systems, Close Combat Systems Maneuver Ammunition Systems and Joint Services.

Project Manager Combat Ammunition Systems (PM CAS), for example, is responsible for equipping soldiers with all tube-launched, indirect-fire munitions and mortar weapons systems for the Army's current, Stryker and Future Forces. Under the Single Manager for Conventional Ammunition (SMCA) responsibilities, PM CAS procures ammunition for other services. The PM does this through life-cycle program management of artillery and mortar products in precision-guided munitions, smart munitions, conventional munitions, mortar weapons systems, mortar fire-control systems and fuzes/fuze setters.

Organizations within PM CAS include Product Manager Excalibur, Product Manager Mortars Systems, the Conventional Ammunition Division and the Business Management Division.

Product Manager Excalibur

The Product Manager Excalibur (PM Excalibur) is developing Excalibur, a precision, autonomously guided, long-range artillery system.

The **XM982 Excalibur** is a 155 mm precision-guided artillery round with extended range. Already being fielded to warfighters and successfully employed in combat operations, Excalibur uses GPS precision-guidance technology to provide accurate, first round fire-for-effect capability in an urban setting.

Excalibur is approximately 1 meter in length and weighs 106 pounds. Its 40-kilometer range and high accuracy result in increased lethality through a decrease in required volume of fire per engagement.

Excalibur 1b is currently in competitive development and testing.

Product Manager Mortars Systems

The Product Manager Mortars Systems (PM Mortars) is responsible for weapon and fire-control systems and for the development of the precision-guided mortar munition (PGMM), a new precision mortar round currently under development. Mortar weapon systems include the 60 mm, 81 mm and 120 mm mortars and related equipment. Fire-control systems, used to calculate mortar missions, include new, improved systems like the mortar fire-control system-heavy (MFCS-H) and the lightweight handheld mortar ballistic computer (LHMBC).

The **M224 60 mm mortar weapon system** is a lightweight, high-angle-of-fire, smooth-bore, manportable, muzzle-loaded mortar with improved rate-of-fire capabilities. The M224 consists of the following components: M225 cannon (tube), M170 bipod assembly, M7 baseplate, M8 auxiliary baseplate and the M64A1 sight unit.

The M224 fires the complete family of 60 mm ammunition, such as high explosive, smoke, illumination, infrared illumination and practice cartridges. With ranges from 70 meters to 3,500 meters, the M224 meets lethality, range and weight requirements for light forces without an additional transportation requirement.

The **M252 81 mm mortar system** is a smooth-bore, muzzle-loaded weapon that replaced the M29A1 mortar. It features a high-rate-of-fire, extended range, improved lethality and improved overall system characteristics. The entire family of 81 mm ammunition can be fired by the M252. The M252 consists of the following components: M253 cannon (tube), M177 bipod, M3A1 baseplate and the M64A1 sight unit.

The **M120/M121 120 mm Battalion Mortar System** is a smooth-bore, muzzle-loaded, high-angle-of-fire weapon that replaced the M30 4.2-inch mortar, providing increased range, lethality, illumination and smoke screening effectiveness over the previous system. It consists of the M298 barrel assembly, M190/M191 bipod assembly, the M9 baseplate and the M67 sight.



Soldiers carry an Excalibur round.

The 120 mm battalion mortar system provides close-in and continuous indirect-fire support to maneuver forces and can rapidly respond to threats. The battalion mortar platoon must move frequently to avoid counterfire and maintain continuous fire support to advancing friendly forces.

This mortar system has been fielded for use in mechanized infantry, armor and cavalry units with the M1064A3 tracked mortar carrier (M121). Light units use a towed version of the mortar, which is transported by the M1101 trailer (M120), and will mount on the QuickStow TM device for easy emplacement and displacement.

The M120 towed system consists of the following components: M298 cannon (tube), M190 bipod, M9 baseplate and the M67 sight unit. The M120, when transported on the M1100 trailer, is primarily towed by a high-mobility, multipurpose wheeled vehicle (Humvee).

The M121 carrier-mounted mortar system consists of the M298 cannon, M9 baseplate (for ground mount mode), M191 bipod, an adapter kit for mounting in the M1064A3 and the M67 sight unit with an extension assembly. The turntable provides a 90-degree area of fire. The adaptation kit has a breech piece socket, bipod support, travel clamp assembly, step assembly and brackets to mount the mortar into the M1064A3.

Both 120 mm mortar system configurations use graphic scales, M16 and M19 plotting boards, firing tables and the M23 mortar ballistic computer. The system is compatible with the M2 aiming circle, M45 series boresight equipment, M14 aiming posts and the M58/59 aiming post lights. The mortar fire-control system is currently being fielded (see below), which will vastly improve all fire-control aspects of the system.

The **XM326 Stowage Kit (Quick Stow)** is a 120 mm mortar improvement. The powered device will allow a 120 mm mortar to be carried as a single unit. The device uses a mortar support strut to hold the mortar tube, base plate and bipod solidly together. This assembly is emplaced or recovered by a hydraulic driven winch. A manual lift winch and strap are also available for use as a manual backup. Once the 120 mm mortar is emplaced, the support strut is disengaged and the hauling platform is moved before mortar firing begins.

The **M313 Training Insert** is a subcaliber insert used to reduce the life-cycle training costs of the M120/M121 battalion mortar system by approximately $33 million per year. The M313 will replace the M303 insert. The M313 is capable of firing the 300 series and newer 800 series 81 mm ammunition. The M303 is restricted from firing the 800 series ammunition due to higher pressures generated during firing.

The M313 consists of an 81 mm mortar tube similar to the current M253 tube, a spacer and a mock 120 mm tube which allows access to the 81 mm tube's firing pin. The system uses the breech cap from the tactical 120 mm tube to provide more realism in training.

The M313 retains all the performance characteristics of the M253 81 mm mortar tube used with the M252 mortar system. The M313 is approximately half the cost of the M253, weighs 4.5 pounds less, and incorporates an internal blast attenuation device, reducing the number of parts and simplifying maintenance and operation. Other recent government and industry development efforts have focused on precision guidance and extended range options.

The M95/M96 Mortar Fire-Control System (MFCS) is a revolutionary improvement in mortar fire-control capability, linking mortar fires with the digital battlefield. MFCS provides digital fire-control capability for mortar carrier vehicles. It also provides digital connectivity with AFATDS, 3 mil azimuth and 1 mil elevation pointing accuracy, no crew dismount and ballistic calculations within 10 seconds. MFCS combines a highly accurate weapon pointing device, an inertial navigation/position system and a digital communications ca-

pability embedded in the fire-control computer to create a highly responsive and accurate fire-control system. The system allows mortar crews to send and receive digital call-for-fire messages, determine the pointing and position of the weapon, and calculate ballistic solutions. The mortar fire-control system is made up of the following hardware that is ruggedized for use in combat, in all types of weather, and in military vehicles: pointing device (TALIN Datasheet), commander's interface, gunner's display, driver's display, GPS PLGR, power distribution assembly and cables. Mortar fire-control system capabilities provide significant enhancements in survivability, accuracy and responsiveness, while providing a link to other digital fire-control network assets. Most notably, since the system can receive a fire mission on the move, MFCS allows mortars to stop, fire and move in less than one minute—down from the current 8/12 minute (day/night) standard. A mortar section can utilize split operations without a crew dismount, allowing for dispersed operations. Accuracy of the mortar is also increased by a factor of three. All of these advantages increase the survivability and responsiveness for mortars on the future battlefield.

A planned improvement for the MFCS is the **XM150 Dismounted Mortar System.** The XM150 dismounted mortar system is similar to the M95 120 mm, M121 carrier mounted mortar system in that it will be an add-on system to an already fielded mortar system: the 120 mm M120 towed mortar system with the Humvee fire direction center vehicles. It will also serve as a platoon-level digitally integrated fire-control system consisting of position/navigation, weapon pointing and ballistic computation. The primary differences between the dismounted MFCS and the heavy MFCS are their base vehicle platforms, power requirements and need for certain components to be manportable.

The **M32 Lightweight Handheld Mortar Ballistic Computer (LHMBC)** is a joint service Marine Corps/Army system that calculates the ballistic solution for the entire family of fielded U.S. mortars and their complete inventory of ammunition.

With the M23 mortar ballistic computer currently being phased out of the U.S. Army inventory, the LHMBC has been developed to meet U.S. Army and U.S. Marine Corps requirements for a lightweight handheld ballistic computer to support dismounted operations.



M136 AT4 light antiarmor weapon

Product Manager Close Combat Systems

The **Project Manager Close Combat Systems** includes Product Managers for Intelligent Munitions systems (IMS), Countermine and EOD, IED Defeat/Protect Force, Networked Munitions, Force Application, Special Projects and Shoulder Launched Munitions and Pyrotechnics.

Representative program examples from Product Manager Special Projects and Shoulder Launched Munitions include the M136/AT-4, AT4-CS, M141, UAW and M72 series.

The **M136 AT4 Light Antiarmor Weapon (AT4)** is the Army's primary light antitank weapon. It is a recoilless rifle used primarily by infantry forces for engagement and defeat of armor threats. The rifle's design permits accurate delivery of an 84 mm high-explosive antitank warhead providing excellent penetration capability and lethal after-armor effects.

The system weighs approximately 15

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Bunker defeat munition (BDM)/SMAW-D



pounds and is manportable. The AT4 system consists of a free flight, fin-stabilized rocket packed in an expendable, one-piece, fiberglass-wrapped tube. The launcher is watertight for ease of transportation and storage.

The M136 AT4's warhead uses an extremely destructive, 440-gram shaped-charge explosive that can penetrate more than 14 inches of armor. PM CCS discontinued purchase of the AT4 in favor of its newest iteration, the AT4 confined space system.

The **AT4 Confined Space (AT4-CS)** is a manportable, single-shot, disposable anti-armor shoulder-fired munition that can be fired from a confined space. It significantly increases the soldier's ability to fight in an urban environment. The AT4-CS consists of a fiberglass-reinforced launching tube fitted with a firing mechanism, pop-up sights, a carrying sling, protective covers and bumpers. The recoilless design is superior to that of rocket-type weapons for confined space applications. Resistance to shock damage contributes to the weapon's high reliability.

The system weighs 7.5 kilograms and has an effective range of 300 meters. The AT4-CS is a self-contained weapon consisting of a free flight, fin-stabilized, rocket-type cartridge packed in an expendable, one-piece, fiberglass-wrapped tube. There are two versions: high penetration and reduced sensitivity.

The **M141 Bunker Defeat Munition (BDM)/SMAW-D** is a shoulder-launched munition that meets an urgent U.S. Forces Command requirement to fill the "Bunker Buster" void in the Army inventory. The manportable system is highly effective against targets, including fortified positions (earth and timber bunkers), and is also capable of breaching masonry walls and neutralizing light armored vehicles at ranges of 15 to 500 meters.

The SMAW-D system is fully operational at 11 meters, making it an optimum weapon for military operations in urban terrain.

The **Urban Assault Weapon (UAW)** is the Army's next-generation shoulder-launched munition. It is designed for use by the objective force warrior to dominate complex and urban terrain in order to fight and finish the enemy. UAW will also contribute to survivability by enabling soldiers to engage targets from protected positions

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without exposing themselves to enemy fires and effects.

The UAW will be a disposable, shoulder-fired weapon capable of defeating light armored vehicles and personnel within bunkers or behind masonry and brick walls. It will not require any maintenance or a dedicated gunner, and will use existing or future night sights. The UAW will replace the M72A3 LAW, M136 AT-4 and XM141 bunker defeat munition.

The **M72 Light Antiarmor Weapon (LAW)** is a lightweight, self-contained, antiarmor system consisting of a 66 mm rocket packed in a compact, disposable launcher. It is manportable and may be fired from either shoulder. The launcher, which consists of two tubes, serves as a watertight packing container for the rocket and houses a percussion-type firing mechanism that activates it. The M72 LAW is capable of penetrating half a foot of armor, with an effective range of up to 220 meters.

Product Manager Countermine and EOD

The Product Manager Countermine and EOD focuses on the Army's ability to detect, mark and neutralize mines, including planning and executing minefield clearance. Developed products integrate state-of-the-art technologies into handheld, ground and airborne detection systems as well as breaching, neutralization and clearing systems to assure soldier mobility and provide force protection.

One example, the **AN/PSS-14 Mine Detecting Set** (formerly known as Handheld Standoff Mine Detection System [HSTAMIDS]) is a vast improvement over today's metallic handheld mine detectors. It employs a state-of-the-art metal detector and ground penetrating radar, which are coupled with an advanced microprocessor array and software to achieve a high probability of detection (in excess of 95 percent) for both large and small metallic and low-metallic antitank and antipersonnel mines.

It also significantly reduces the number of false targets or alarms. If a mine is detected, audio cues alert the operator.

Built-in warning and test equipment also alerts the operator of potential system malfunctions and assists maintenance personnel in fault identification. The result is a greatly improved system that protects the soldier and enhances his/her ability to detect land mines.

The AN/PSS-14 weighs approximately 8 pounds, uses standard batteries and can be operated by a single soldier.

The AN/PSS-14 is also being procured by the U.S. Marine Corps as their advance mine detector.

The **Ground Standoff Mine Detection System (GSTAMIDS) Block 0** is an upgrade of the current IVMMD system. Its primary mission is route clearance. The detection vehicle is teleoperated from a mine-protected control/clearance vehicle, which automatically detects and marks all metallic and nonmetallic antitank mines. Antitank mine detection capability is enhanced through maturing ground-penetrating radar, enhanced metal detection and infrared camera subsystems. The edges of the swept path are also marked.

With the advent of the Army's objective force transformation, the **Ground Standoff Mine Detection System (GSTAMIDS) Block 1 Program,** built on GSTAMIDS Block 0, was restructured to meet the countermine requirements for Army modernization.

In support of the Engineer School's assured mobility concept in forward areas, the unit of action will need to conduct countermine operations. GSTAMIDS will be installed on two multifunction utility/logistics equipment (MULE) countermine (CM) vehicles. GSTAMIDS will detect and mark mines, temporarily mark the lane and bypass or neutralize antitank mines along a 4-meter path on primary and secondary roads at a speed of 5 to 15 kph.

Each MULE-CM contains a complete set of detection, marking and neutralization capabilities. The two MULEs will be controlled by a manned ground vehicle. The MULEs will proceed forward at maximum speed to a region of interest (ROI) as defined by situational awareness. The GSTAMIDS will perform its mission, then proceed to the next ROI.



AN/PSS-14 mine detecting set

The **Airborne Surveillance, Target Acquisition and Minefield Detection System (ASTAMIDS)** detects, locates and identifies ground targets, minefields and obstacles; determines ranges to ground targets; and designates for attack by laser-guided munitions.

ASTAMIDS provides support to the brigade combat team (BCT) and the modular BCT force on a single UAV payload. When integrated on the unmanned aerial vehicle, ASTAMIDS will provide the capability to conduct reconnaissance, surveillance and target acquisition (RSTA), target designation, and minefield and obstacle detection.

This multifunction capability is made possible by a multispectral payload of daylight TV, midwave infrared and multispectral imaging sensors operating in the visible and infrared spectrums. This multifunctionality is augmented even further by an eye-safe laser range finder, laser illuminator and laser designator (LD). The hardware is integrated into a highly stabilized gimbal that uses advanced "step and stare" technologies to scan the ground in nadir or off-nadir modes.

Advanced automatic detection software processing of ASTAMIDS imagery allows for near-real-time operations in various worldwide environments, day or night, by exploiting fused multispectral images and other advanced concepts. This development will provide a combined minefield detection and an enhanced RSTA/LD capability that does not currently exist.

The **Husky Mounted Detection System (HMDS)** provides the warfighter with enhanced capabilities to detect improvised explosive devices (IEDs) and antitank mines along roads with increased operational tempo.

The **IED Interrogation Arm** provides standoff detection of IEDs using a probing/digging tool to expose objects and a metal detector/visible camera to identify targets. It has a working range of more than 26 feet and is capable of moving objects up to 200 pounds. This arm can be used on both the RG-31 and Husky counter-IED vehicles, having the same capabilities for each platform.

Attached to either the RG-31 or JERRV mine clearance vehicles, the **Vehicle Optics Sensor System (VOSS)** is a powerful network of daytime TV, night vision and thermal capabilities that is able to locate IEDs, snipers and other threats at greater stand-off distances. A stabilized camera allows for the detection of IEDs while mobile, in day or nighttime conditions. The camera's ability to record video of operations allows for after action review, training and mission briefing for route-clearance operations.

INDIVIDUAL EQUIPMENT AND WEAPONS

The soldier is the Army's most deployed combat "system" and the most essential weapon in the Army's arsenal. Activated in October 2001, Program Executive Office (PEO) Soldier equips the soldier as a system through centralized development, acquisition, fielding and sustainment of virtually everything the soldier wears or carries. The mission of PEO Soldier is to increase soldiers' combat effectiveness, save soldiers' lives and improve soldiers' quality of life.

PEO Soldier views the individual soldier as the center of the Army, the cornerstone on which all Army operations are built. This view motivates PEO Soldier to meet the needs of individual soldiers in order to support the larger view of the Army. To accomplish this, PEO Soldier solicits and uses soldier feedback to guide the development and fielding of new equipment.

Since its founding, PEO Soldier has grown tremendously in both the scale of operations and the scope of its products. To retain and increase its organizational standard of excellence, PEO Soldier will be undergoing a major restructuring over the course of the next year. Part of this reorganization will integrate the rapid fielding initiative (RFI) into a G-4 directorate in order to institutionalize the benefits of RFI across the PEO Soldier portfolio. In addition, several of the project manager positions will be refocused to a smaller range of products. While no products will be removed from PEO Soldier's portfolio, these changes will allow for a faster, more focused response.

As the demands of warfighting change and new technologies evolve in response, PEO Soldier stands ready to equip soldiers with the best gear in the shortest time, to support the deployment of soldiers wherever our global interests dictate. The technologies PEO Soldier develops and the equipment PEO Soldier fields are crucial components in meeting the strategic, operational and tactical challenges of today's soldier and the soldier of the future. PEO Soldier products are used by every American soldier, every day, everywhere in the world.

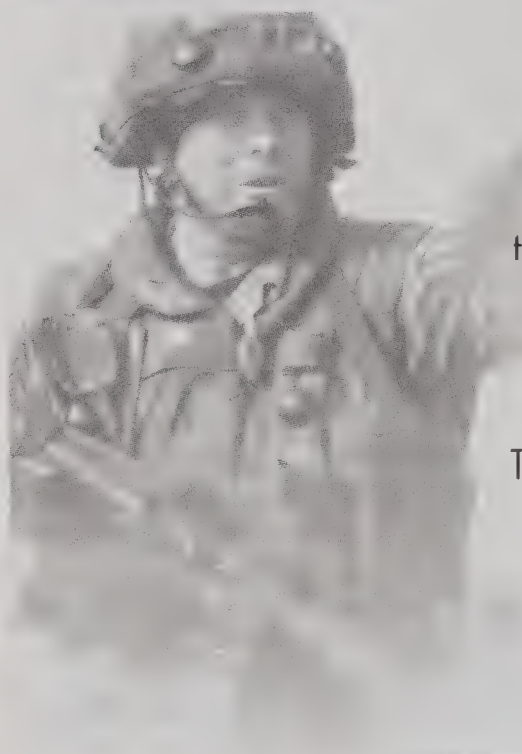
Rapid Fielding Initiative (RFI)

PEO Soldier launched the rapid fielding initiative (RFI) in 2002 to streamline the process for distributing equipment to deploying units and ensure that all soldiers—active and reserve components—were outfitted with the most advanced individual and unit equipment available, providing significant improvements to soldier combat effectiveness, survivability and operational quality of life. To date, RFI has equipped nearly 1.5 million deploying soldiers.

RFI coordinates the activities of three closely aligned cells responsible for the planning, logistics support and fielding operations associated with the expeditious equipping of deploying soldiers and units. The focus of fielding operations has transitioned over time from immediate-response, in-theater fielding efforts to scheduled, home-station fielding events coordinated to minimize the impact on predeployment training.

Equipment fielded by RFI currently consists of 73 items procured by the project managers that provide capabilities enhancements essential to combat operations. Items currently fielded by RFI include individual soldier mission-essential equipment, such as the advanced combat helmet and ballistic eye protection, and organizational force protection/mobility items, such as urban terrain equipment and infrared strobes. The list also includes critical unit lethality enhancement items such as improved ammunition packs, small binoculars and advanced weapons optics.

As soldiers deploy for their second, third or fourth combat tour, RFI has implemented the Lean Six Sigma (LSS) processes to minimize duplicative fieldings of equipment. The process, called lean fielding, saved the Army more than $84 million in its first 12 months. RFI's latest LSS project for accountability transfer automates



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The Land Warrior system supports individual, close combat operations.

support systems and reduces the administrative workload on commands in updating property books and effecting lateral transfers of equipment to individual clothing records. Furthermore, RFI planning and fielding activities fully support and complement the Army force generation operating cycle.

PEO Soldier is restructuring in order to institutionalize the RFI process through the establishment of a G-4 directorate. This is aimed at achieving the greatest synergism and efficiencies from the acquisition and fielding cells within the project management and director offices to field the soldier as a system. This transformation also encompasses a reduction of the historical reliance on supplemental funding for soldier equipment in order to provide more predictable requirements over time and facilitate programming of funds to support the modernization process.

Project Manager Soldier Warrior

Project Manager Soldier Warrior supports soldiers through the acquisition of integrated soldier systems. Current systems include Land Warrior, Ground Soldier, Mounted Soldier and Air Warrior. Project Manager Soldier Warrior product managers develop and integrate components into complete systems designed to increase combat effectiveness, decrease combat load and improve mission flexibility.

Land Warrior is a first-generation, integrated, modular fighting system for soldiers engaged in close combat operations. Land Warrior combines computers, lasers, navigation technology and radios with other mission equipment to substantially improve individual situational awareness. The systems approach optimizes and integrates multiple capabilities with minimal impact on combat load and logistical footprint. During the surge phase of Operation Iraqi Freedom, the 4th Battalion, 9th Infantry Regiment (4-9 IN), of the 4th Brigade, 2nd Infantry Division, was equipped with 229 Land Warrior ensembles, which are worn by the unit's leadership down to the team-leader level, and 133 Mounted Warrior ensembles for Stryker crew members. The 4-9 IN became the first unit in the history of warfare to employ a digitally networked combat soldier in theater. The soldiers who used the system from May 2007 to June 2008 reported that the reliability in combat situations surpassed all expectations and that the added capabilities are invaluable. As a result of soldiers' success with Land Warrior in combat, the Army received supplemental funds for an approved operational needs statement to equip the 5th Brigade, 2nd Infantry Division Stryker Brigade Combat Team, in fiscal year (FY) 2009 and equip the 3rd Battalion, 5th Special Forces Group, in FY 2010.

The **Ground Soldier Ensemble (GSE)** of the Ground Soldier System builds upon Land Warrior as an integrated dismounted soldier situational awareness system for use during combat operations. The system provides unparalleled situational awareness and understanding to the dismounted soldier, allowing for faster and more accurate decision making in the tactical fight. This translates into soldiers being at the right place at the right time with the right equipment, making them more effective and more lethal in the execution of their combat mission.

The centerpiece capability of GSE is the ability to graphically display the individual soldier's location on a digital medium against a geo-referenced image as the background. Additional soldier locations will also be graphically displayed through the Army Battle Command System, connecting the soldier to the network through a radio that will send and receive information from one to another. These radios will also connect the combat soldier to higher-echelon data and information products to assist the combat soldier in decision making and situational understanding. All of this will be integrated on a graphic user interface that is user-defined, allowing soldiers to easily see, understand and interact in the method that best suits the user's particular mission.

The physical subcomponents of GSE include a display to provide the soldier's information, a computer to process and populate the information on the screen, an interface device that allows user interaction with the system, a power source, an operating system to provide the system functionality and run tactical applications and Battle Command, and a networked radio transmitter/receiver device to send and receive information. As a system worn by the combat soldier, size and weight must be kept to a minimum while retaining the ruggedness required for combat operations including water immersion. The GSE must have a slim and flexible form that can accommodate the "shooter's preference" method of employing the system in accordance with the variety of different mission profiles and soldier personnel equipment configurations.

GSE entered the technology develop-

ment phase in February 2009.

The **Mounted Soldier System (MSS)** is the next generation of Mounted Warrior. It will provide combat vehicle crew members and platform commanders with increased mission effectiveness on the network-centric battlefield in the areas of command and control, situational awareness, communications, force protection, survivability, mobility and sustainability. The MSS provides the combat vehicle commander increased capabilities to conduct offensive and defensive operations. MSS consists of three systems (cooling, cordless communications and display) that allow the crew member to reduce heat stress, communicate wirelessly with the vehicle's intercom and radios, and remotely display the vehicle's displays for Force XXI Battle Command, Brigade-and-Below (FBCB2), Remote Weapon Sight, Driver's Enhanced Vision System and other platform-centric video assets.

Air Warrior (AW) is a modular, integrated, rapidly reconfigurable combat aircrew ensemble that saves lives and maximizes Army aircrew mission performance. The Air Warrior system equips the soldier who operates the aircraft and closes the capability gap between human and machine. More than 16,000 Army aircrew members have been equipped with the system. Air Warrior increases personal protection and



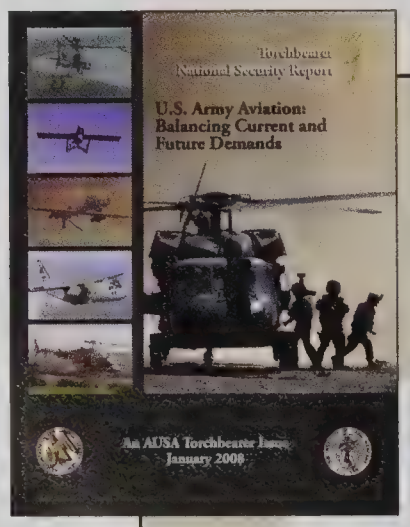
Air Warrior

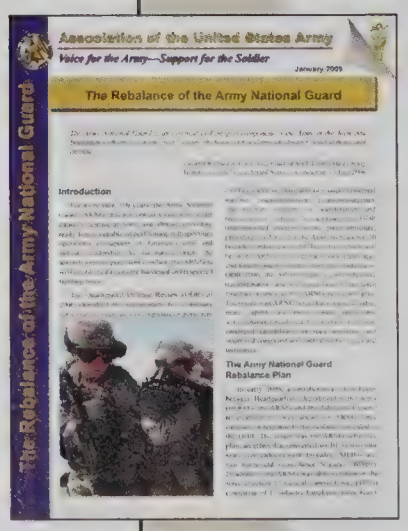
mission performance while decreasing weight and bulk. The system consists of:

- A primary survival gear carrier that includes first aid, survival, signaling and communications equipment.
- Body armor tailored for the unique requirements of the aircrew member.
- The Aircrew Integrated Helmet System.
- Overwater survival equipment including an underwater breathing device and life raft.
- The Microclimate Cooling System (MCS), which includes a cooling garment worn under chemical protective and duty uniforms that increases mission endurance under extreme heat by more than 350 percent. The MCS has been adopted for use by ground forces including Stryker, Abrams, Bradley, M9 ACE, the Navy, the Marine Corps and foreign militaries, with more than 16,000 systems fielded to date.

The Electronic Data Manager (EDM), a touchscreen kneeboard computer, enables the aircrew member to quickly plan missions and react to mission changes in flight. The EDM, compatible with night-vision goggles and readable in direct sunlight, features a moving map via a global positioning system, Blue Force Tracking-Aviation capability and Windows-compatible software. More than 2,700 EDM systems have been fielded to the Army, Navy, Marine Corps and foreign militaries.

The Aircraft Wireless Intercom System (AWIS) provides wireless aircrew communications. AWIS allows hands-free voice communication between crew members and provides the first true aircraft intercom capability for medical evacuation he-





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licopter personnel during rescue hoist and dismounted patient recovery missions in close proximity to the aircraft. The AWIS consists of an aircraft-mounted interface unit and mobile equipment units worn by each member of the aft crew. The AWIS enables omnidirectional simultaneous communications among crew members within the aircraft network out to approximately 200 feet of the center of the aircraft.

Project Manager Soldier Sensors and Lasers Provisional (PM SSL)

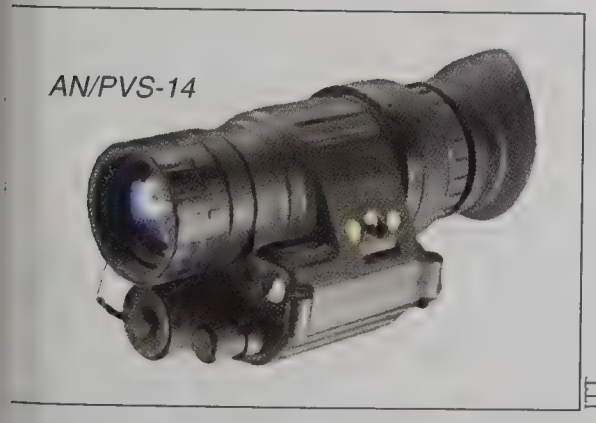
Project Manager Soldier Sensors and Lasers Provisional (PM SSL) provides soldiers with improved lethality, mobility and survivability in all weather and visibility conditions. Soldier-borne sensors and lasers enhance the soldier's ability to see in all battlefield and lighting conditions, to acquire objects of military significance before the soldier is detected, and to target threat objects accurately for engagement by soldiers or guided munitions. These systems provide critical, on-the-ground direct support to U.S. forces.

Soldier Sensor Maneuver Support (MVN)

Maneuver Support (MVN) is the branch of SSL responsible for the products that enhance the operational capabilities of soldiers with night-vision aiming devices.

The **AN/AVS-6 Aviator's Night-Vision Imaging System (ANVIS)** is a helmet-mounted, direct-view, third-generation image-intensification piloting device that enables flight operations under very low ambient light conditions. The latest version, AN/AVS-6(V)3, is capable of operating down to near-starlight conditions. The system incorporates 25 mm eye relief; dual-span adjustment knobs; gated power supply; either filmless or thin-film tube designs; a fine-focus objective lens; and a low-profile battery pack. The low-light sensitivity is a 10 percent improvement over its predecessor and a 35 to 40 percent improvement over the earliest ANVIS.

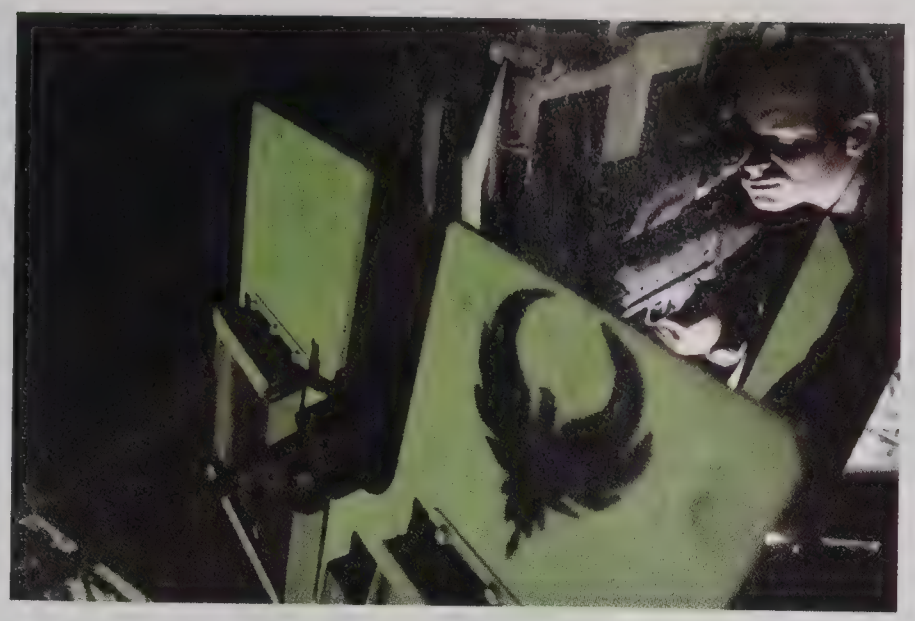
The **AN/PVS-14 Monocular Night-Vision Device (MNVD)** is a lightweight



AN/PVS-14

ITT

head- or helmet-mounted image-intensification device that can also be mounted to the M16/M4 receiver rail. It is designed to be used in conjunction with rifle-mounted aiming lights. The AN/PVS-14 provides



PAS-13 thermal weapons sight mounted on an M-240B machine gun

soldiers with the ability to conduct nighttime operations including driving, maneuvering, first aid, map reading and maintenance. The latest AN/PVS-14 operates on a single AA cell.

Multifunctional Aiming Lights (MFAL), including **AN/PEQ-2A, AN/PEQ-15** and **AN/PEQ-15A,** are used in conjunction with night-vision goggles to engage targets. MFAL devices contain infrared aiming lights and illuminators as well as visible pointers in a single, lightweight, compact package. When zeroed to the weapon, these devices provide an invisible, continuous infrared beam along the weapon's line of fire that is effective to the maximum firing range of the weapon.

The **AN/PEQ-14 Integrated Laser/White Light Pointer** adds the functions of a flashlight into an MFAL device for an effective small-arms lightweight integrated targeting system.

The **AN/PVS-10 Night-Vision Sniper Night Sight (SNS)** is a lightweight, weapon-mounted, passive image-intensification device designed primarily for use by snipers for day and night operations. A select lever permits the user to change the mode of operation between day and night. The SNS employs a black-line reticule that can be illuminated for night operation. A rail mounting interface allows quick mounting or dismounting from the weapon.

The **AN/PVS-26 Clip-On Sniper Night Sight** is a lightweight, clip-on, image intensified night sight for the M110 Semi-Automatic Sniper System that mounts in front of the day optic sight. The AN/PVS-26 employs a variable gain image tube that can be adjusted by the sniper depending on ambient light levels. The AN/PVS-26 provides the sniper the capability to accurately acquire and engage targets at low light levels without the need to remove the day optic.

The **AN/PSQ-23 Small Tactical Optical Rifle Mounted (STORM) Micro-Laser Rangefinder (MLRF)** is a lightweight, multifunctional laser system designed to operate on a variety of individual weapons, crew-served weapons and weapons platforms, including the M-4/M16, the M107 Sniper Rifle, the M110 Sniper Rifle, the Sniper Tripod and the Stryker Remote Weapons Station. It combines the functionality of a laser rangefinder, infrared aiming laser, infrared laser illuminator, digital compass and visible pointer into one package. STORM can be connected to an external global positioning system (GPS) device to determine distance to targets. On crew-served weapons, STORM provides the critical range component to the fire control for achieving high probabilities of first-shot kills.

The **AN/PSQ-20 Enhanced Night-Vision Goggle (ENVG)** provides the soldier with enhanced mobility and situational awareness in all weather and battlefield obscurant conditions. ENVG is a helmet-mounted device that combines long-wave infrared sensor data with passive low-light-level image-intensification into an integrated display. The resultant image takes advantage of each sensor's strengths while minimizing individual sensor limitations.

The **AN/PAS-13 Family of Thermal Weapon Sights (TWS)** enables soldiers with individual and crew-served weapons to see deep into the battlefield, increase surveillance and target acquisition range, and penetrate obscurants day or night. The TWS uses forward-looking infrared (FLIR) technology and provides a standard video output for training, image transfer or remote viewing. Light, medium and heavy variants provide viewing to the maximum effective range of the designated weapon.

The **TWS Head Mounted Display (HMD)** integrates with the AN/PAS-13 Thermal Weapon Sight (TWS) to provide a remote viewing capability for TWS and vehicle-mounted imagery. It allows a more comfortable firing position of the TWS on the M2/MK19 weapon systems. The HMD operates on four AA cells and weighs less than 8 ounces. The system is designed to operate with Army standard-issue protective eyewear, providing a minimal visual obscuration that maintains or enables the soldier's overall situational awareness.

Lightweight laser designator rangefinder



Soldier-borne Sense Through the Wall (STTW) provides soldiers with the capability to detect, locate and "sense" personnel with concealed weapons or explosives behind obstructions from a stand-off distance. Currently in development, STTW will be employed by soldiers in military operations on urban terrain and subterranean environments to locate and classify threats.

Gunfire Detection Systems (GFDS) are lightweight soldier-wearable sensors that accurately locate and engage enemy snipers. The sensor locates the enemy gunfire through the acoustic signatures associated with the fired round to produce a range and bearing back to the threat. This information allows the soldier to conduct battle drills in response to the sniper's actual location.

The Family of Flashlights (FoF) **Weapons Mounted Light (WML)** is one of the four components of the FoF that include the WML, the Tactical Handheld Light, the Hands-Free Helmet Light and the Crew-Served Weapons Light. The WML is a small (7 inches or less), lightweight (10 ounces or less with batteries) white light that can be weapon-mounted or handheld. The WML is employed on small arms, including the M16A4 modular weapons, M4/M4A1, M249 and M240B. The WML has dual activation controls, includes an infrared capability and is designed to operate on two DL123 batteries.

Soldier Fire Support Sensors (FS)

Soldier Fire Support Sensors (FS) is the branch of PM SSL that supports the research and development of target designation systems.

The **AN/PED1 Lightweight Laser Designator Rangefinder (LLDR)** enables fire-support teams and forward observers to accurately locate targets, digitally transmit target location data to the tactical network, and laser-designate high-priority targets for engagement with precision munitions. The two primary components are the **Target Locator Module (TLM)** and the **Laser Designator Module (LDM).** The TLM can be used as a stand-alone device or in conjunction with the LDM. The TLM incorporates a thermal imager, day camera, electronic display, eye-safe laser rangefinder, digital magnetic compass, selective availability/antispoofing module, GPS electronics and digital export capability.

The Laser Targeting Locating Systems **Mark VII** and **Viper (V21)**, as well as the **Mark VII E Laser Targeting Locating Module**, provide fire-support teams and forward observers with daylight and limited night capability to observe and accurately locate targets for voice transmission of target data to the fire-support command, control, communications, computers and intelligence (C^4I) system. They can be handheld or tripod-mounted. Each incorporates an eye-safe laser rangefinder and a digital magnetic compass to determine range, azimuth and vertical angle from the observer to targets of interest. The Mark VII and Viper systems can compute and display target location when connected to a GPS device. The Mark VII E has a built-in GPS device and an uncooled FLIR for improved night capability.



Modular lightweight load-carrying equipment

Project Manager Soldier Protection (PM SP)

PM SP develops and fields advanced soldier protection products, comfortable uniforms to enhance mission effectiveness and improved parachute systems. These products are designed to protect soldiers and allow them to operate in any conditions.

Product Manager Core Soldier (PM CS)

Product Manager Core Soldier (PM CS) supports soldiers in operational environments and improves their lethality, survivability, situational awareness, health, safety, mobility and sustainability by providing safe, durable and operationally effective individual and unit equipment. PM CS enhances survivability through technologically advanced tactical and environmental protective clothing, individual chemical protective gear, and personnel parachutes and other airdrop equipment.

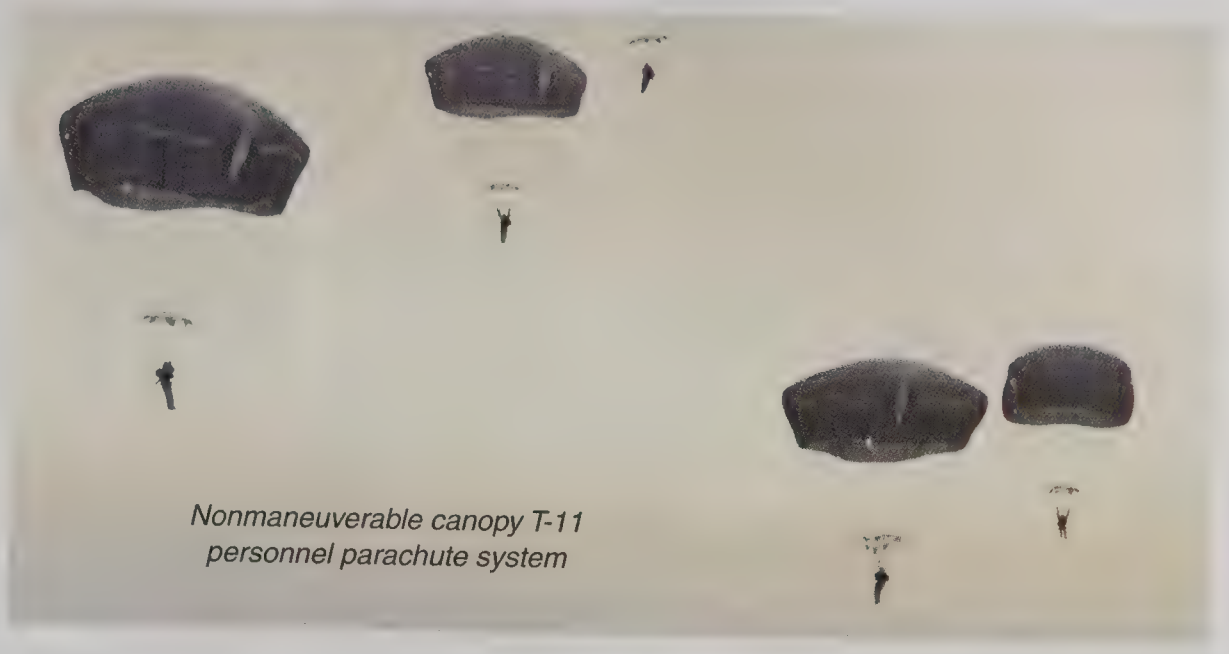
Modular Lightweight Load-Carrying Equipment (MOLLE) provides today's soldier with a modular, flexible, load-carrying system that can be tailored to meet mission needs. MOLLE consists of a rucksack with removable pockets and a fighting load carrier that can accept removable pouches for rifle, pistol, grenade, squad automatic weapon and medical items. For short-duration missions, there is an assault pack and a waist pack. The modularity allows individuals or commanders to tailor

the load to meet mission needs.

The **Army Service Uniform (ASU)** provides a basic set of components that allows soldiers to dress from the lowest to the highest end of service uniforms with little variation required, thus reducing the need for numerous uniforms and reducing the burden on soldiers to have multiple service uniforms. The ASU is based on the Army blue uniform, and the men's and women's coats from that uniform are unchanged.

The belted trousers and slacks with a traditional low waistline will be available for daily wear. The high-waist men's trousers traditionally worn with suspenders will be retained for wear with the Army blue mess uniform. The fabric of the coat, trousers, slacks, and skirt is a 55-percent polyester and 45-percent wool blend that does not require special care. A new white herringbone shirt will be for daily wear, and a commercial white shirt will be worn for ceremonial and formal occasions. Officers and noncommissioned officers will wear gold stripes on the trousers/slacks. Junior enlisted soldiers (specialist and below) will have trousers/slacks without stripes on the legs. The beret will be the standard headwear worn with the ASU. Officers and noncommissioned officers (corporal and above) may wear the service cap as an optional item. Officers and enlisted soldiers will be authorized to wear overseas stripes on the right sleeve. Enlisted service stripes have been reduced in size and will be worn on the left sleeve. The new Combat Service Badge will be worn in place of the Former Wartime Service Shoulder Sleeve Insignia to represent combat service.

There are several uniforms being fielded by PM CS that now offer a fire-resistant capability. These include the **Fire-Resistant Army Combat Uniforms (FR ACUS)**, the **Advanced Army Combat Uniform (A^2CU)**, the **Improved Combat Vehicle Crewman Coverall (iCVC)** and the **Army Combat Shirt (ACS).**



Nonmaneuverable canopy T-11 personnel parachute system

The **T-11 Personnel Parachute System** provides the airborne soldier with the next-generation tactical personnel parachute system and represents the first complete modernization of the tactical parachute system since the early 1950s. The T-11 parachute system includes a newly designed main canopy as well as a completely redesigned reserve parachute (T-11R) and an integrated harness assembly. The T-11 parachute system is designed to reduce soldier injury rates with a slower rate of descent, reduced opening shock and reduced oscillations. The T-11 can accommodate a higher jumper weight than



Combat requires teamwork and mission-critical equipment that must perform without fail. Gentex delivers a complete suite of integrated, high performance intercommunication systems designed specifically for the challenges soldiers face, both on the ground and on the water. From headsets to analog and digital intercommunication systems, Gentex has you covered.



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DUAL PTT ADAPTER
Enables dismounted use of headwear traditionally used on mounted-only applications. Pop 'N Go operation – pop the intercom cable and go – no fumbling to connect portable radios.



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The Generation III extended cold-weather clothing system

the T-10D it is designed to replace.

The **Maneuverable Canopy 6 (MC-6)** provides the airborne soldier with a new static line-deployed, steerable parachute system. The MC-6 has several improvements designed to reduce soldier injury rates. The MC-6 has a lower opening shock, reduced oscillation, a lower rate of descent for greater safety, increased forward drive and a better turn ratio than the MC1-1C. The MC-6 parachute system combines a new main canopy with a completely redesigned reserve parachute and an integrated harness assembly, both of which are common to the T-11. The MC-6 can accommodate a higher jumper weight than the MC1-1 series it is designed to replace.

The **Generation III Extended Cold Weather Clothing System (GEN III ECWCS)** is a 12-component, versatile, multilayered system that provides soldiers the capability to tailor to mission and environmental requirements. The GEN III ECWCS system consists of lightweight undershirt and drawers; midweight shirt and drawers; fleece cold-weather jacket; wind cold-weather jacket; soft-shell jacket and trousers; extreme cold/wet-weather jacket and trousers; and extreme cold-weather parka and trousers. The new materials offer a greater range of performance and environmental protection and reduce overall bulk and weight, providing greater versatility in meeting soldiers' needs. GEN III ECWCS has proven itself as a combat enabler in Afghanistan.

The **Fire Resistant Environmental Ensemble (FREE)** is a multilayered, versatile all-climate system that allows combat vehicle and aircrew members to adapt to varying mission requirements and environmental conditions. Most importantly, it is fire-resistant. The FREE is comfortable and ergonomically efficient for wear in the confines of aircraft and armored vehicles. The system consists of male and female undergarments, base layer, midweight under layer, light weather outer layer, intermediate weather outer layer, cold-weather gloves, extreme/wet-weather layer, rigger belt and wool socks. It will replace the aviation cold-weather clothing system (ACWCS). The FREE is color-compatible (universal camouflage pattern and foliage green) with ground soldier uniforms. New materials offer a greater range of breathability and environmental protection, providing greater versatility in meeting soldiers' needs.

Product Manager Soldier Survivability (PM SSV)

Product Manager Soldier Survivability (PM SSV) develops and fields state-of-the-art force-protection equipment that defeats ballistic and fragmentation threats in theater. PM SSV provides superior body armor, helmets and other gear that greatly reduce the threat of serious injury.

Interceptor Body Armor (IBA) is a joint service item designed and developed to incorporate the requirements of the Army and Marine Corps. Interceptor is the model name for modular, multiple-threat body armor. It has gone through nine improvements since it was introduced. The **Outer Tactical Vest (OTV)** and the streamlined and lighter-weight, quick-release **Improved Outer Tactical Vest (IOTV)** protect against fragmentation and 9 mm rounds. Attachable throat and groin pieces expand the ballistic protection, and webbing attachment loops across the front and back of the vest accommodate modular lightweight load-carrying equipment pouches.

The Deltoid and Axillary Protector (DAP) is a component of IBA that provides additional protection to the upper arm and underarm areas from fragmentary and 9 mm projectiles. DAP was developed as an add-on to the OTV to protect soldiers from the threat of improvised explosive devices in current operations. This auxiliary protective capability is integrated into the IOTV.

The **Enhanced Small Arms Protective Insert (ESAPI)** plates provide multiple-hit protection to the chest and back against various small-arms threats, including armor-piercing rounds.

The **Enhanced Side Ballistic Insert (ESBI)** plates provide additional ballistic protection for side and underarm areas not covered by ESAPI. The ESBI can withstand a small-arms hit, including armor-piercing rounds. ESBI plates are attached to the OTV with a carrier assembly that employs webbing on the front and back. ESBI plates can be further secured through incorporation with the DAP. The IOTV includes integrated ESBI plate carriers.

The **X Small Arms Protective Insert (XSAPI)** plate was designed to meet near-term emerging threats and will provide additional ballistic protection against more lethal small-arms rounds.

The **Advanced Combat Helmet (ACH)** comes in four shell sizes and includes a modular pad suspension system, retention system and nape pad. The modular pad suspension system improves blunt-force impact protection, stability and comfort. The cotton/polyester retention system, a four-point design, allows for quick adjustment for head size. The nape pad attaches to the retention system, improving comfort and stability and providing protection against 9 mm and fragmentation threats to the nape area of the neck. The ACH weighs 2.9 to 3.8 pounds, depending on size. The helmet cover is available in the universal camouflage pattern.

The **Helmet Sensor** is a small, lightweight, low-power sensor suite that mounts to the Advanced Combat Helmet or the Combat Vehicle Crewman Helmet. The helmet sensor detects, measures, and records impact and blast overpressure associated with improvised explosive devices (IEDs) and other events that may cause concussions in an operational environment. The Army is using two versions of the helmet sensor, one that mounts externally to the rear of a helmet and one that mounts internally under the padding in the crown of the helmet. Both sensors continuously and automatically collect data, recording peak overpressure from IED blasts, crashes, blunt impact and ballistic events. This information can potentially be used to provide better and more effective medical treatment to injured soldiers.

Project Manager Soldier Weapons (PM SW)

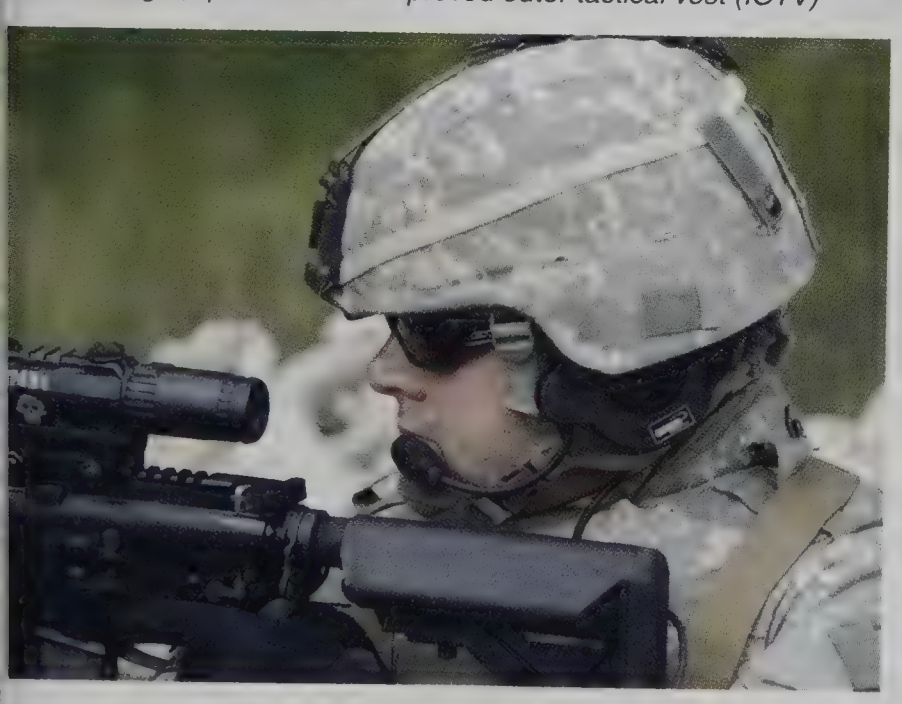
Project Manager Soldier Weapons (PM SW) supports soldiers through enhancement of current systems and development of next-generation weapons technology. It focuses on ensuring that soldiers are equipped with world-class weapons sys-



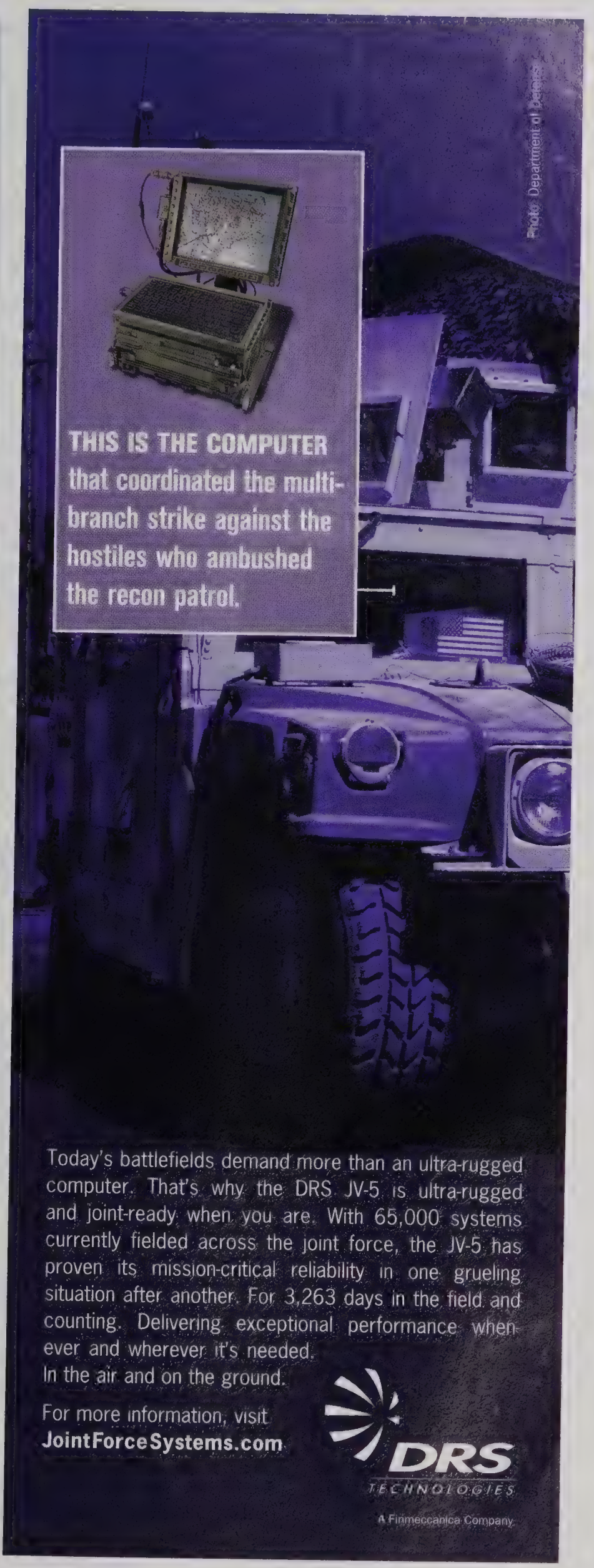
Interceptor body armor consists of an outer vest, ballistic plates and attachments that stop or slow bullets and fragments.



Lighter-weight, quick-release improved outer tactical vest (IOTV)



Advanced combat helmet (ACH)



tems, ammunition, and associated target acquisition and fire-control products today and in the future.

Product Manager Individual Weapons

PM IW is responsible for research and development of current and future rifles, carbines, pistols, shotguns, grenade launchers, small-arms ammunition and related target acquisition/fire-control products.

The **XM25 Counter Defilade Target Engagement System** is a next-generation weapon still in development. The XM25 will fire 25 mm munitions including high-explosive airburst (HEAB), armor-piercing, antipersonnel, nonlethal, training and breaching rounds. The XM25 incorporates full-solution target acquisition/fire control that integrates a thermal sight, 2x direct-view optics, a laser rangefinder, compass, fuze setter, ballistic computer and internal display. The XM25 has a 500-meter range against point targets and 500- to 700-meter range against area targets and is capable of defeating hidden targets.

The Army's **M9 9 mm Pistol** is a semiautomatic, double-action pistol that is lighter, more lethal and safer than its predecessors. It is the primary sidearm of crew-served-weapon crew members and others who have a personal defense requirement, such as law enforcement personnel, unit leaders and aviators.

The **M16A4 5.56 mm Rifle** is a flat-topped M16A2 that incorporates a military standard 1913 rail on top of the weapon's receiver, adding operational flexibility.

The **M4 5.56 mm Carbine** replaces the M3 submachine gun, select M9 pistols and M16A2 rifles for unit leaders, crew-served gunners, vehicle crews, radio operators, light infantry, Airborne (Air Assault), combat engineers and others. It provides improved firepower compared with the M3 and M9, and it allows mounting of the latest generation of fire-control accessories without tools. It is 1 pound lighter than the M16, offering improved portability.

The **M110 Semi-Automatic Sniper System** is a 7.62 mm sniper rifle that brings a semiautomatic capability to sniper teams. The M110 incorporates a 3.5x10 scope with illuminated Mil-reticle and rapid fire/reload, and it comes with a suppressor. The system is particularly effective in urban areas where there are multiple targets and frequent close-combat situations.

The **M107 .50-caliber Semi-Automatic Long-Range Sniper Rifle (LRSR)** is a commercial off-the-shelf, antimateriel and countersniper semiautomatic, direct-line-of-sight .50-caliber rifle. It can complete missions out to 2,000 meters that cannot be accomplished with current sniper rifles. It supplements a sniper role by supporting combat operations by precisely engaging high-value targets, with greater firepower and standoff ranges to improve sniper survivability.

The **M150 Rifle Combat Optic** increases the probability of a first-round hit at distances out to 600 meters with the M4 carbine, M16 rifle and the M249 Squad Automatic Weapon. The optic allows soldiers to rapidly make the transition between long-range and close-quarters engagements without degrading the ability to conduct reflexive fire techniques.

The **M320 Grenade Launcher Module (GLM)** is a 40 mm low-velocity grenade launcher weapon module that will replace all M203 series grenade launchers mounted on the M16/M4 series of rifles and carbines. The XM320 is intended to be lighter, safer and more reliable than current man-portable grenade-launching systems, and will provide day and night firing capability. The M320 can also be converted without tools to operate in a stand-alone mode.

The **M26 12-Gauge Modular Accessory Shotgun System (MASS)** provides warfighters with a lethal, nonlethal, and door-breaching capability through a 12-gauge accessory shotgun attached to the primary/host weapon. The system attaches underneath the barrel of the primary/host weapon and provides a capability equivalent to a stand-alone shotgun without carrying a second weapon. The M26 can also be converted without tools to operate in a stand-alone mode.



M16A4 rifle



Compatible with the latest weapon-mounted optics, accessories and ammunition, the M16A4 weighs 8.5 pounds with a loaded 30-round magazine and field strips easily.

Colt Defense LLC

Product Manager Crew Served Weapons (PM CSW)

PM CSW is responsible for research and development of current and future light and heavy machine guns, grenade launchers, sniper systems, small-arms ammunition, and related target acquisition/fire-control products.

The **XM806 Light Weight .50-Caliber Machine Gun** is a next-generation weapon, capable of firing all of the current .50-caliber ammunition in the inventory. This includes, but is not limited to, the standard M33 ball round, the M8 armor-piercing incendiary, the M903 saboted light-armor penetrator, and the MK211 multipurpose round that penetrates, fragments and starts fires. The XM806 weapon system is half the weight and has a quarter of the recoil of the M2, providing soldiers with the punch of a .50-caliber machine gun in the footprint of a 7.62 mm weapon system.

The **M249 5.56 mm Squad Automatic Weapon (SAW)** serves as an automatic rifle and light machine gun for infantry squads, as well as providing light machine-gun capabilities in combat service and combat service support units. The M249 SAW is a lightweight, air-cooled, belt-fed 5.56 mm weapon with fixed headspace and a quick-change barrel feature. The weapon can be fired from the shoulder, bipod/tripod-



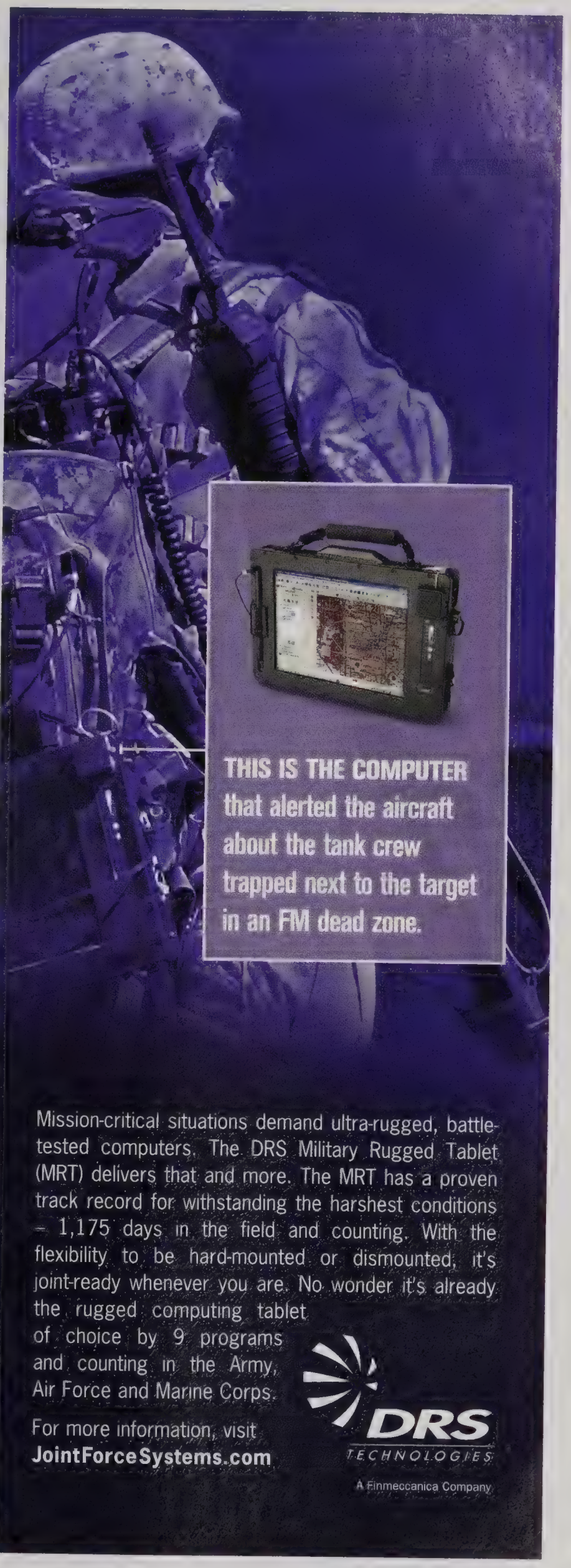
5.56 mm M4 carbine



M107 .50-caliber semi-automatic long-range sniper rifle (LRSR)



M320 grenade launcher module (GLM)





mounted or vehicle-mounted positions. The M249 SAW weighs 17 pounds (23.96 pounds with 200-round box magazine of ammunition) and has a maximum effective range of 1,000 meters against area targets. It replaced the M16 series rifle in the designated automatic rifle role and the M60 machine gun in the light machine gun role.

The **MK19 40 mm Grenade Machine Gun (GMG)** is an air-cooled, belt-fed, blow-back-operated, fully automatic weapon system. It has a maximum effective range of 2,200 meters for area targets and 1,500 meters for point targets. It fires standard high-velocity 40 mm grenade cartridges, including M383 high-explosive antipersonnel rounds, high-explosive dual-purpose (antipersonnel and armor-piercing) rounds and training practice rounds. The MK19 supports the soldier in offensive and defensive roles by delivering a heavy volume of close, accurate and continuous firepower against enemy personnel and lightly armored vehicles. It can be mounted on a tripod or on multiple vehicle platforms and is the primary suppressive weapon for combat support and combat service support units.

The **M240B 7.62 mm Medium Machine Gun** is a ground-mounted, gas-operated, crew-served machine gun. It is a variant of the M240 mounted on Bradley fighting vehicles and Abrams tanks, reconfigured for ground applications with buttstock, bipod, iron sights and forward-rail assemblies. The M240B delivers more energy to the target than the smaller-caliber M249 SAW. The cyclic rate is 550 to 650 rounds per minute, and the weapon's maximum effective range against area targets is 1,800 meters. It comes with an accessory rail integrated with the top cover that is used to attach sighting devices. It is issued to infantry, armor, field artillery and combat engineer units that require medium-support fire; it replaces the ground-mounted M60 machine gun.

The **M240L** is the result of the M240 Weight Reduction program. The M240L is 6.5 pounds lighter than the M240 and 5.1 pounds lighter with the M240B, without losing any reliability or functionality. Weight savings came through the innovative use of titanium for the construction of the system.

The **M240H 7.62 mm Machine Gun (Aviation Version)** is designed for aviation application and demonstrates reliability equal to that of the M240B. It delivers two minutes of continuous suppressive fire and is removable for use in a ground role. It replaces the M60D machine gun for the UH-60 Black Hawk and CH-47 Chinook helicopters as part of their defensive armament systems.

The **M2E2 Quick Change Barrel Kit Program (M2E2)** is a modification of the standard M2 that is easier and safer to use, and eliminates the need for headspace and timing. The current M2 machine gun design requires the operator to properly set the headspace and timing before firing, after assembly and after barrel replacement. Improper adjustment of headspace and timing can cause gun malfunctions, parts damage or personnel injury (including death). The current need to set headspace and timing negatively affects survivability and mission accomplishment as the warfighter must be exposed to enemy fire for extended periods of time while performing barrel-changing procedures. The M2E2 modification will provide warfighters with the ability to quickly change the barrel without the need to reset headspace and timing by implementing a fixed headspace and timing operating system. Other upgrades include the quick-change barrel system, flash hider and carrying handle. The flash hider reduces muzzle flash, making the M2 night-vision friendly. All of these capabilities ensure that commanders have constant firepower and less downtime.

Product Manager Remote Weapons Systems (PM RWS)

PM RWS is responsible for the research and development of weapons stations that are operated via a remote link, thus reducing risk to the soldier.

The **Common Remotely Operated Weapon Station (CROWS)** is a stabilized mount that contains a sensor suite and fire-control software, allowing on-the-move target acquisition and first-burst target engagement without requiring the soldier to leave the safety of the vehicle. The CROWS sensor suite includes a video camera, thermal camera, and a laser rangefinder, enabling accurate target detection and engagement under day and nighttime conditions. CROWS is designed to mount on any tactical vehicle, and supports the MK19 grenade machine gun, .50-caliber M2 machine gun, M240B machine gun and the M249 squad automatic weapon (SAW). CROWS is a force multiplier that provides improved survivability and lethality to the warfighter.



Common remotely operated weapons system (CROWS)

NUCLEAR-BIOLOGICAL-CHEMICAL (NBC) DEFENSE SYSTEMS

A wide range of items and systems provide today's warfighter with contamination avoidance, protection, decontamination and obscuration capabilities. Several representative examples are provided below.

Contamination Avoidance

The United States has fielded several types of nuclear detection and monitoring systems to assist in contamination avoidance. A family of radiological detection indication and computation (Radiac) equipment is being fielded to U.S. forces to upgrade 30-year-old technology with digital equipment that incorporates advances in modern electronics.

Radiac provides soldiers and commanders with nuclear radiation detection equipment, allowing them to fight effectively and survive on the nuclear battlefield. It also minimizes nuclear radiation exposure of troops during such peacetime missions as peacekeeping, nuclear-accident response, and recovery of vehicles and equipment containing radioactive material.

The **AN/UDR-13 Radiac Set** is a compact, handheld, pocket-size tactical radiation meter. It measures and displays



AN/UDR-13 Radiac set

gamma dose rate and total gamma/neutron cumulative dose in a battlefield environment.

A push-button pad enables mode selection, functional control and the setting of audio and visual alarm thresholds for both dose rate and mission dose. A "sleep" mode with automatic wake-up enhances battery life. A liquid crystal display provides data readout and warning-mode messages. As a replacement for the older IM-93/PP-1578, UDR-13 improvements include prompt dose measurement, including neutrons, alarms and rate measurement; backlit display; and stable readings and calibration. It does not need a separate charger.

The **AN/VDR-2 Radiac Set** detects and measures nuclear radiation from fallout and radioisotopes. The system replaces the older IM-174 and AN/PDR-27. It performs ground radiological surveys from vehicles or, in the dismounted mode, as a handheld instrument. The set can also provide a quantitative measure of radiation to help personnel, equipment and supply decontamination operations.

Components of the Radiac set include the Radiac meter IM-243, probe DT-616 and a pouch with strap. Kits are available as common table of allowances items for installation of the Radiac set in various military vehicles.

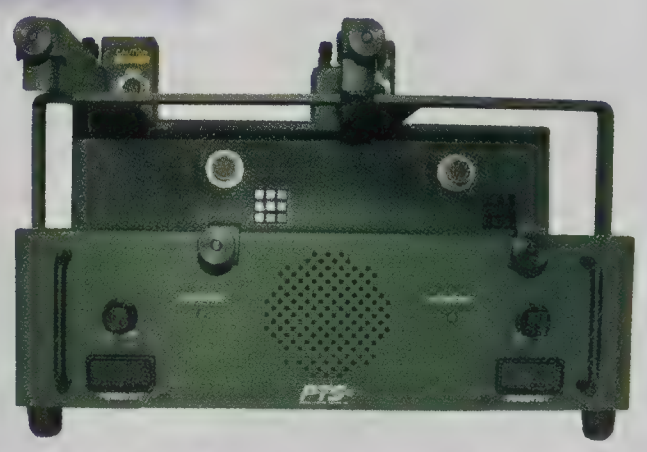
The set includes an audible and/or visual alarm that is compatible with vehicular nuclear-biological-chemical (NBC) protective systems in armored vehicles, and it also interfaces with vehicular power systems and intercoms.

The **AN/PDR-75 Radiac Set** measures the prompt and residual gamma doses and neutron doses stored on the DT-236 individual dosimeter from 1 to 1,000 centigray (cGy). The system provides a new operational capability to monitor and record the total dose exposure of individual personnel to gamma and neutron radiation. It measures total neutron and gamma doses

PTS AC Power Supply Docking Station
Allows Full Operational Communications Capability
in a light weight package for
Dismounted Radio Operations



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AN PRC-150
AN/VRC-110
AN/PSC-5



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GS 35F-0673J

from 0 to 1,000 cGy, and it responds to and measures prompt radiation from nuclear bursts. It will be used to calculate unit radiation status and to perform medical triage and assist in unit reconstitution.

The **AN/PDR-77 Radiac Set** detects and measures alpha, beta, gamma and X-ray radiation. The system replaces the older AN/PDR-56F and AN/PDR-60, which relied on aging technology and were not sensitive enough to accomplish the Army's alpha detection mission.

The AN/PDR-77 is based on the AN/VDR-2. It includes an alpha probe, beta gamma probe and X-ray probe. The set has a digital liquid crystal display, is autoranging and has programmable audio and/or visual alarm thresholds. This is the primary Radiac device to respond to nuclear accidents and maintain Army equipment containing radioactive materials.

The **Multipurpose Integrated Chemical Agent Alarm (MICAD)** is an integrated nuclear, biological and chemical detection warning and reporting system to be used in area warning, combat and armored vehicles, and tactical van and shelter mission profiles. MICAD automates the currently laborious NBC warning-and-reporting process throughout the battlefield. It automates the gathering of NBC contamination data from fielded NBC detectors and sensors and automatically formats and transmits alarms and reports up the chain of command throughout the battlefield.

MICAD provides a communications interface to NBC sensors, provides warnings of chemical and nuclear attacks throughout the battlefield and automatically generates NBC-1/NBC-4 reports over existing tactical communications. It operates with the M22 and an AN/VDR-2 Radiac set. It interfaces with global positioning system (GPS) vehicle navigation systems and modular collective protection equipment; it automates NBC report preparation (NBC-1/NBC-4) and transmission; and it communicates via single-channel ground and air radio system, FBCB^2 or JWARN. Its flexible design allows its use in an area warning role with telemetry link radio.

The **M21 Automatic Chemical Agent Alarm** is the first standoff chemical agent detector approved for fielding to the soldier. It gives early warning of blister and nerve agents up to 5 kilometers, thus allowing field commanders to identify and maneuver around contaminated areas. An automatic scanning, passive infrared sensor, it detects agent vapor clouds by changes that the vapor causes in the background infrared spectra. Scanning a 60-degree arc, the M21 sounds a horn and illuminates either a blister or nerve light. It is fielded in tripod-mounted configurations as well as mounted on a mast on the M93A1 Fox NBC reconnaissance system.

The **M22 Chemical Agent Alarm** is an off-the-shelf alarm system capable of detecting and identifying standard blister and nerve agents. The M22 used the foreign comparative testing program for down-selection of the United Kingdom's GID-3. The M22 system is manportable, operates independently after system start-up, and provides an audible and visual alarm.



M21 automatic chemical agent alarm

The M22 system also provides a communications interface for automatic battlefield warning and reporting. The M22 is an improvement over the M8A1 automatic chemical agent alarm system in four major areas: It provides simultaneous detection and warning of nerve and blister agents; it is significantly more sensitive than the M8A1; it can operate in a collective protection environment; and it is much less responsive to interference, thus reducing false alarms. The M22 is currently fielded to the Army, Navy, Air Force and Marine Corps.

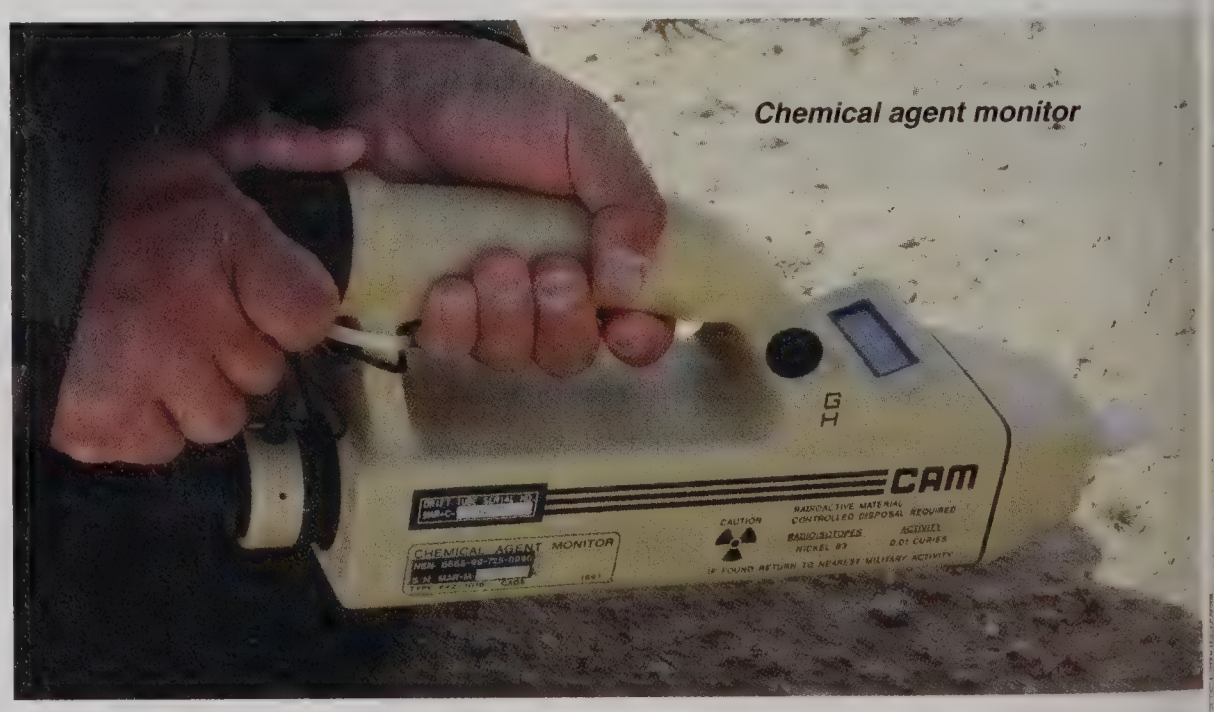
The **Chemical Agent Monitor (CAM)** and the **Improved CAM (ICAM)** provide a means of quickly locating the presence or absence of nerve- and mustard-agent contamination on personnel and equipment.

CAM is a handheld device used by troops in full protective clothing after an attack or exposure to a contaminated area. It provides fast low-level detection of nerve and mustard vapors, differentiates between nerve and mustard agents, provides an indication of the relative magnitude of the hazard present and is not affected by most common forms of battlefield interference.

The use of the CAM on a chemical battlefield lowers the risk commanders may have to take when reducing the level of mission-oriented protection posture in a combat situation. CAM gives commanders the ability to quickly monitor for contamination, thereby allowing soldiers and equipment to remain engaged in their combat missions. CAM is also used to check the effectiveness of decontamination operations.

Like CAM, ICAM is a handheld, soldier-operated, post-attack device for monitoring chemical agent contamination. It detects chemical agent vapors by sensing molecular ions of specific mobilities (time of flight), and uses timing and microprocessor techniques to reject interference. The monitor detects and discriminates among nerve and mustard agent vapors. ICAM consists of a drift tube, signal processor, molecular sieve, membrane, confidence tester, dust filters, buzzer and battery pack.

The monitor measures 4 inches by 7 inches by 15 inches and weighs approximately 5 pounds. ICAM differs from CAM in its greater reliability (an estimated 300 percent improvement), faster start-up time (one-tenth of the time) and significantly reduced maintenance costs (an estimated $135 million cost savings over the life of the system).



Chemical agent monitor

The **Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD)** is a new detection system designed to provide American 21st-century warfighters with state-of-the-art capability in detecting nerve, blister and blood agent vapor clouds. JSLSCAD is a fully automatic detection system that searches the surrounding atmosphere for chemical agent vapor clouds. It is the first chemical vapor detection system to furnish 360-degree on-the-move coverage from ground-, air- and sea-based platforms at average distances of 2 kilometers. JSLSCAD will provide warfighters of the four armed services with early warning to avoid contaminated battlespaces or, if avoidance is not possible, time to don protective masks and clothing.

JSLSCAD is a passive infrared (IR) system that detects the presence of chemical agent vapors by processing energy collected in the 8- to 12-micron region of the electromagnetic spectrum. It compares the collected IR spectra against a library of known agent spectra. When detection is made, JSLSCAD identifies the agent cloud and alerts the warfighter with audible and visual alarms.

Intended JSLSCAD applications include various ground vehicle, shipboard and fixed-emplacement platforms including M93A1 Fox vehicle, NBC Reconnaissance Vehicle (NBCRV), ships and fixed-site installations. The design of the JSLSCAD provides for communication with the NBC Joint warning and reporting network (JWARN).

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That's the toll-free number to call AUSA national headquarters. The AUSA Action Line is open 8:30–5:00, Monday through Friday, except holidays. If you have a question about AUSA, give us a call.

Smoke and other obscurants have been used in wars dating back to ancient Greece. On today's battlefield, smoke can counter new generations of smart weapons. Smoke is used as camouflage, as blinding smoke laid directly on enemy positions, and as a decoy to confuse and mislead enemy forces. These basic smoke applications are used to increase survivability, buy maneuver time for the attacker, and protect forward-assembly areas and high-priority rear areas for the defense.

Smoke particles scatter or absorb radiant energy used by troops and smart weapons for target acquisition and for weapon guidance and control. Smart-weapon sensors operate in three main parts of the electromagnetic spectrum: visible; near-, mid- and far-infrared wavelengths; and millimeter wavelengths.

The most effective scattering smokes are aerosols that are the same size as the operating wavelengths of the sensor to be defeated. The best smoke for the visible spectrum may be transparent in the far-infrared area. The entire chain of electro-optical, infrared and millimeter-wave devices linking a smart weapon to a target is susceptible to smoke and other obscurants. In addition to absorbing light, some smokes emit heat, which can cover or clutter the thermal images of targets.

The reflection of laser or radar beams from smoke clouds can produce false targeting information for smart weapons, which can be blinded and defeated by smoke. Battlefield obscurants allow combatants to take advantage of technology overmatch. In Operation Desert Storm, U.S. ground forces used infrared-viewer technology at night to achieve dramatic results.

The Army uses several models of smoke-generation systems, including the M56 Coyote, the M58 Wolf, the M157A2 Lynx and the M1059/M1059A3 Lynx. In addition, the M6 countermeasure discharger provides self-screening protection to individual combat vehicles.

The **M56 Coyote Smoke-Generation System (SGS)** provides large-area obscuration in the visual and infrared spectra. It

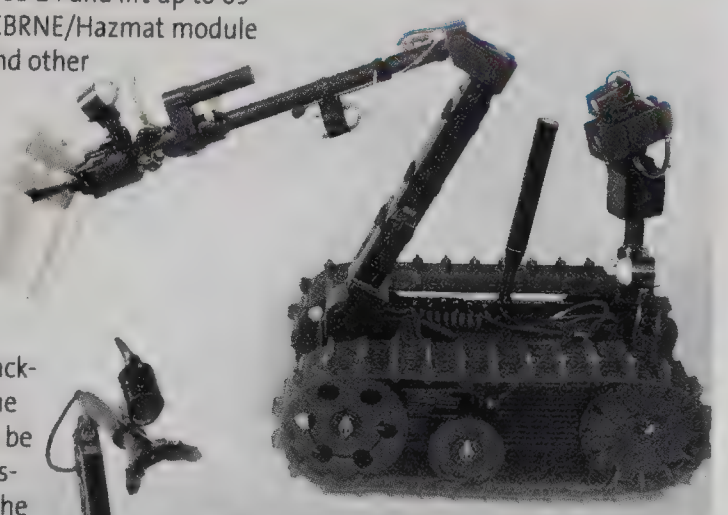
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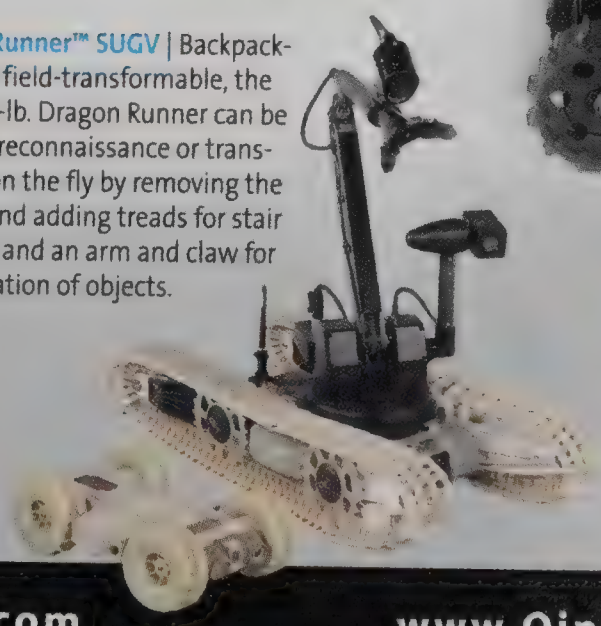
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is a Humvee-mounted, large-area, smoke-generator system. In addition to providing enhanced spectrum coverage, the M56 system provides smoke generators with a new wheeled-vehicle platform. The system is mounted on the new expanded-capacity M113 Humvee and provides greater payload capacity and higher mobility for supporting smoke units.

Six M56 Coyotes form a smoke platoon. They support light and airborne maneuver units by disseminating smoke on the move or from stationary positions to defeat enemy sensors and smart munitions, such as tank thermal sights, guided munitions, directed energy weapons and other systems operating in the visible through far-infrared regions of the electromagnetic spectrum. The system is modular and uses a gas turbine engine to disseminate obscurants. The visual screening module is capable of vaporizing fog oil at a rate equal to the M157 smoke generator for up to 90 minutes.

The infrared screening module can disseminate particulate material to provide 30 minutes of screening. M56 program planners cite the expanding global use of infrared targeting and sighting devices for prompting development of the M56 Coyote, the Army's first large-area smoke system capable of generating visible and infrared blocking screens.

The M56 Coyote was type-classified "standard" in September 1994 and was followed by an initial production contract award for 296 systems in March 1995. First-article and production verification testing were successfully completed in September 1996.

By the end of February 2000, 231 systems had been fielded to U.S. Army Training and Doctrine Command, U.S. Army Forces Command (FORSCOM) and U.S. Army Reserve Command (USARC). Fielding continues to FORSCOM and USARC.

A materiel change program to add a millimeter-wave module provides extended spectral coverage to defeat threat weapon systems operating in the millimeter regions of the electromagnetic spectrum.

The **M58 Wolf Smoke-Generation System** places the capabilities of the M56 on a derivative of the tracked M113 armored personnel family. In addition to its current multispectral obscurant screening capabilities, planned materiel changes will allow the addition of a millimeter-wave (MMW) obscuration module, providing the capability to counter the threat arising from the wide proliferation of advanced visual and infrared sensors and future MMW sensors.

The chemical smoke platoon consists of seven M58 vehicles. Six of these are organized into two squads of three and the smoke platoon leader leads in the seventh vehicle. Missions include providing static and mobile visual and/or infrared screening (haze, blanket and curtain) to conceal ground maneuver forces, and supporting breaching and recovery operations.

The M58 Wolf was type-classified in August 1995. Following a successful production verification test, the Wolf received materiel release approval in the first quarter of FY 1998 and has been successfully fielded. It was fielded to Army Reserve units, along with training, late in FY 2000.

The **M157A2 Lynx Smoke-Generation System** lets Army forces on the move produce large-area visual smoke screens. The system uses dual-pulse engines operating on standard Army fuels to produce large clouds of fog-oil vapor to defeat visual range observation and tracking methods, including lasers.

Its major components are two M54A2 smoke generators, an air compressor assembly, a 120-gallon fog-oil tank, a fog-oil pump assembly and a remote-control panel. The entire package is mounted on the rear of an M1037/M1097 Humvee with an M284A1 mounting kit.

The M157A2 effort emerged through a post-Operation Desert Storm integrated product team approach that targeted the earlier M54 engine on the M157 system for both operational cost reduction and simplified logistics.

Although the earlier M54 engines relied on unleaded gasoline only, the new M54A2 pulse jet engines burn any mid-viscosity Army fuel—including diesel, JP4, JP8 and motor gasoline—to produce a thick white smoke cloud. Each engine is capable of vaporizing 40 gallons of fog oil in a one-hour mission.

The **M1059/M1059A3 Lynx Smoke-Generator Carrier** is an M113A2 armored personnel carrier modified to transport a single M157 smoke-generating set. The two generators, mounted on the roof of the vehicle under armor, are remotely controlled from inside the vehicle. A 120-gallon fog-oil tank located within the vehicle can generate smoke for approximately one hour without refueling. The Army initially fielded approximately 200 M1059 systems between 1988 and 1990. Many of these vehicle systems have now been converted to the M1059A3 configuration with the reliability improvement for selected equipment power upgrade.

The **M6 Countermeasure Discharger** is a four-tube smoke grenade launcher that enables combat vehicles to conceal themselves from hostile surveillance, target acquisition and weapon guidance systems. The M6 can fire all Q-STAG 401 conforming grenades (66 mm) and interfaces with vehicle integrated defense systems.



"And just what do you mean by 'peace be with you'?"

Biological Detection

The **M31A1 Biological Integrated Detection System (BIDS)** mitigates the effects of biological warfare attacks during all phases of a campaign. As a corps-level asset, it is employed by a dedicated biological defense company to detect large-area biological attacks.

The BIDS network provides the basis for warning and confirming that a biological attack has occurred. The system provides presumptive identification and produces a safety-configured sample for later laboratory analysis.

The M31A1 detection system is made up of a shelter (S788 lightweight multipur-



M93 Fox vehicle

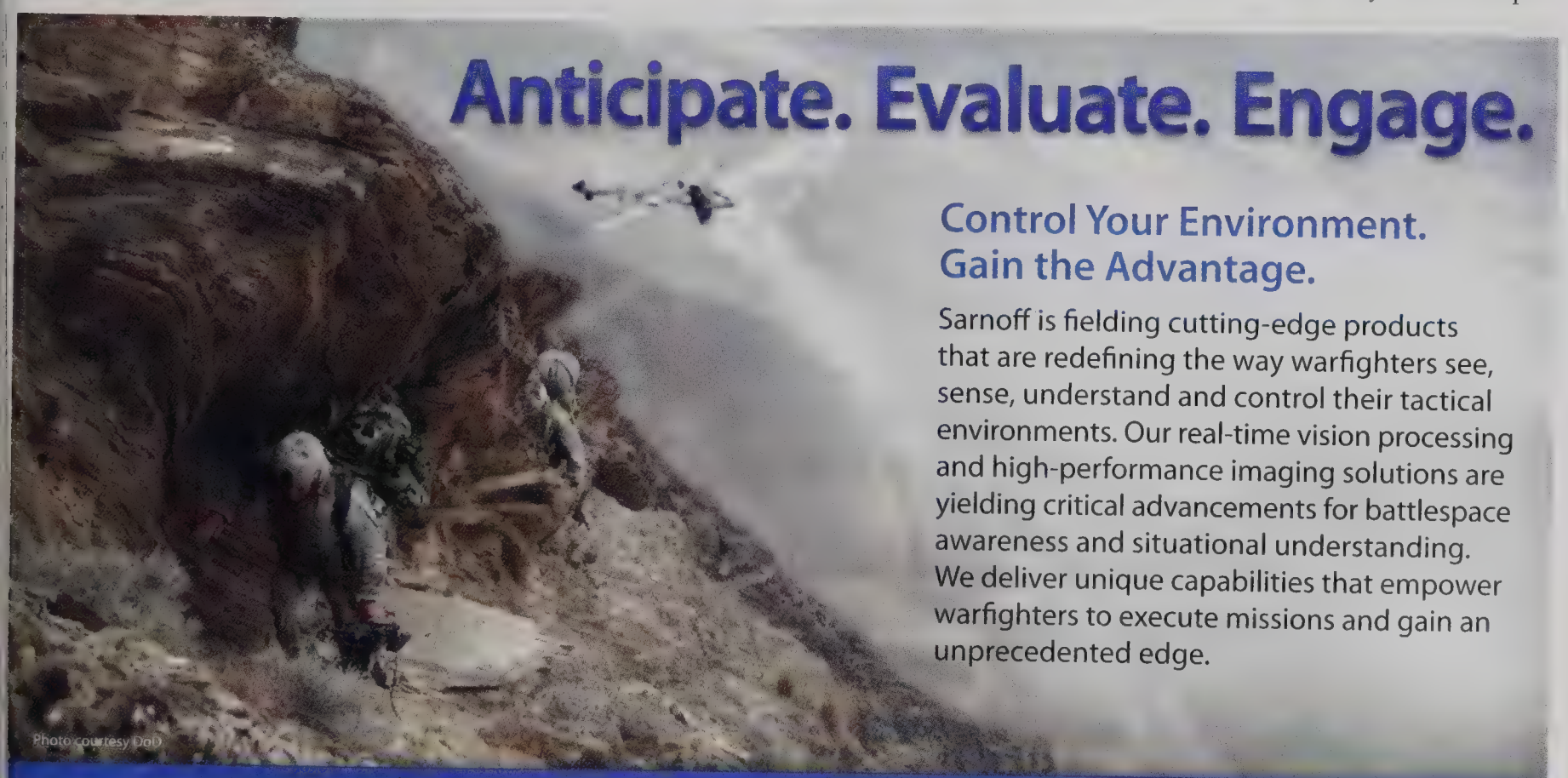
pose shelter) mounted on a dedicated vehicle (M1097 heavy Humvee) and equipped with a biological detection suite. The systems include a trailer-mounted 15-kilowatt generator (PU-801) to provide electrical power, a GPS receiver (AN/PSN-11 PLGR), tactical and long-range communications equipment (SINCGARS and Harris HF radios) and a meteorological sensor.

BIDS uses multiple complementary technologies to detect various characteristics of a biological aerosol attack. BIDS integrates aerodynamic particle sizing, luminescence, fluorescence, flow cytometry, mass spectrometry and immunoassay technologies in a hierarchical, layered manner to increase detection confidence and system reliability. BIDS detects all types of biological agents and identifies specific agents of interest. The system can be easily upgraded or modified to identify other additional agents, based on changes in threat conditions. BIDS will detect any eight agents in less than 10 minutes and identify them, simultaneously, in less than 30 minutes. The system collects a sample for confirmatory analysis and report detection and identification results by voice transmission.

The **M93A1 Fox Nuclear-Biological-Chemical Reconnaissance System (NBCRS)** is a dedicated system of nuclear and chemical sampling, detection and warning equipment, and biological sampling equipment integrated into a high-speed, high-mobility, six-wheel armored vehicle. It is capable of performing NBC reconnaissance on primary, secondary or cross-country routes throughout the battlefield. The M93A1 is the Block 1 improvement of the M93 FOX NBCRS Interim System to meet all of the requirements of the approved required operational characteristics, and reduces the crew size to three. It is capable of detecting chemical contamination in its immediate environment through point detection, and at a distance through the use of a standoff detector (M21 Chemical Agent Detector Alarm). It automatically integrates contamination information from detectors with input from onboard navigation and meteorological systems and automatically transmits digital NBC warning messages through the maneuver control system to warn follow-on forces. The M93A1P1 uparmored configuration added improved weapon and slat armor to improve crew survivability.

The **Joint Biological Point Detection System (JBPDS)** is the first fully automated biological threat agent detection, collection and identification suite designed for employment by all four services.

JBPDS is a modular system that pro-





XM50 joint service general purpose chemical-biological protective mask (JSGPM)

vides both continuous and real-time aerosol detection with presumptive identification for up to 10 agents simultaneously within 18 minutes. Upon positive identification, the user is alerted by both an audible and visual alarm. Each identified sample is safely collected and packaged for laboratory analysis. Both remote and local monitoring is available.

The modular design of the JBPDS provides not only an open architecture for upgrade insertion, but also the capability to remain in operation even if one of the components fails.

The JBPDS is available in four different configurations (portable, shelter, shipboard and trailer) to provide a common detection and identification capability for joint interoperability and supportability. JBPDS integrated platforms include BIDS, Stryker reconnaissance vehicle (RV), surface ships and Joint Service Lightweight NBC Reconnaissance System. JBPDS also supports homeland defense operations.

The M31E2 JBPDS-BIDS is an Army variant composed of an S788 lightweight multipurpose shelter mounted on a dedicated vehicle M1097 or M1113 Humvee with digital communication (FBCB2) and an onboard generator. It is a corps-level asset employed by a dedicated biological defense company to detect large-area biological attacks. The BIDS network provides the basis for warning and confirming that a biological attack has occurred.

Individual NBC Protection

The **M40/42-Series Protective Masks**, a family of chemical-biological (CB) protective masks, provide respiratory, eye and face protection against chemical and biological agents, toxins, radioactive particles and battlefield contaminants. The M40/42 series replaces the M17, M25 and M9 masks. Features include an improved face seal for better protection and vision, flexibility at temperature extremes, increased useful life, weather and ozone resistance, improved soldier comfort, and ease of cleaning and maintenance.

M40/42-series masks are issued to soldiers, sailors and marines—the M42A2 to armored crews and the M40A1 to the balance of the force and U.S. Army Materiel Command surety sites.

The M40A1 and M42A2 masks have a silicone rubber face piece with an in-turned peripheral face seal and binocular rigid-lens system. The basic mask, the M40A1, includes a face-mounted canister with NATO standard threads (gas and aerosol filter) that can be worn on either the left or right side; a drinking tube; and clear and tinted lens "outserts." When the canister is attached to a connection hose and equipped with a canister carrier, larger mask carrier and detachable microphone, the mask becomes the M42A2, which is used by all combat-vehicle crew personnel. The interchangeability also allows the repair of masks using a face piece assembly while retaining other existing, undamaged parts instead of a total replacement. This advance saves significant money and time.

The **M45 Chemical-Biological Protective Mask** replaces the M24 and M49 mask systems. The M45 mask supports the Land Warrior program, as well as Joint Special Operations Command requirements, and serves as the mask for Army, Navy, Air Force and Marine Corps personnel who cannot be fitted with the standard M40/M40A1, M42/M42A2 or MCU-2A/P protective masks.

The M45 mask provides protection to the face, eyes, head, neck and respiratory tract from CB agents and radioactive particles without the aid of forced ventilation air, while maintaining compatibility with rotary-wing aircraft-sighting systems and night-vision devices. The M45 mask consists of close-fitting eye lenses, front and side voice-mitter for face-to-face and telephone communication, a microphone pass-through for aircraft communications, a drinking tube pass-through, a low-profile canister interoperable hose assembly to allow both hose and face-mounted configurations, interchangeable nose cups, a rubber face piece with an in-turned peripheral seal, and a second skin and hood.

Protection is provided by the agent-resistant face piece and second skin and hood.

Although all three components protect the soldier against CB agents in gaseous form, the second skin and hood provide increased liquid agent protection. The Land Warrior configuration does not include the hose assembly, hood, canister baffle, microphone or microphone cable.

The mask is available in four sizes, and the interchangeable nose cups come in five different sizes to improve fit, comfort and vision. A different nose cup configuration is available for left-hand firing. Vision-corrective inserts can be fitted inside the face piece.

Close-fitting eye lenses are shaped to improve peripheral vision and are compatible with most optical sighting and night-vision devices. Easy use of a drinking system permits intake of liquids.

The **XM50 Joint Service General Purpose Chemical-Biological Protective Mask (JSGPM)** program will provide the next-generation mask for all U.S. joint service ground forces.

The JSGPM requirements include meeting existing and new threats posed by both chemical and biological agents and selected toxic industrial materials/chemicals that American forces may face in the future.

Other key performance parameters include a focus on reduced weight and bulk (smaller logistical footprint), compatibility with current and emerging equipment, improved reliability and an overall improved mission performance for soldiers, aircrews, marines and sailors. The cradle-to-grave acquisition approach will also focus on reducing the total ownership cost for all services by replacing the five existing general-purpose protective masks with this one item.

The design goals call for significant improvement (50 percent) over the M40 in the areas of breathing resistance, weight and bulk, compatibility with current and future systems, maintenance (50 percent fewer parts), and agent and toxic industrial chemical filtration included in the filter design. Production is planned to run through FY 2015 for a U.S. acquisition objective of approximately 2.2 million masks.

The **M43/M48 Chemical-Biological Aircraft Protective Mask** provides CB protec-

tion for Apache aviators and was designed for compatibility with the AH-64 Apache helicopter's integrated helmet and display sighting system (IHADSS) and optical relay tube.

The M43 mask has a form-fitting butyl rubber face piece with lenses that mount close to the eyes; an integrally attached CB hood and a skull-type suspension system; an inhalation air distribution system for regulating the flow of air to the oronasal cavity; lenses and hood; and a pressure-compensated exhalation valve assembly for maintaining overpressure in the mask and hood. The overpressure is maintained by a portable blower/filter system that operates on battery or aircraft power and which filters air through a pair of C2 canisters.

The M43-type I mask has a notched right-eye lens to allow interface with the helmet display unit of the IHADSS equipment. The mask was specifically designed for compatibility with the subsystems of the AH-64, and it provides protection for the head, face, eyes and respiratory system against field concentrations of all chemical and biological agents in liquid and aerosol forms, and against toxins and radioactive fallout particles.

Vision correction is accomplished via contact lenses. In addition, the mask provides external voice communications and a drinking tube assembly.



Chemical-biological protective shelter (CBPS)

M43 is type-classified limited production-urgent and is currently fielded to all Apache pilots.

The M48 mask, chemical-biological Apache aviator, is an improved M43A1-series mask (M43-type I) that is used by Apache helicopter pilots.

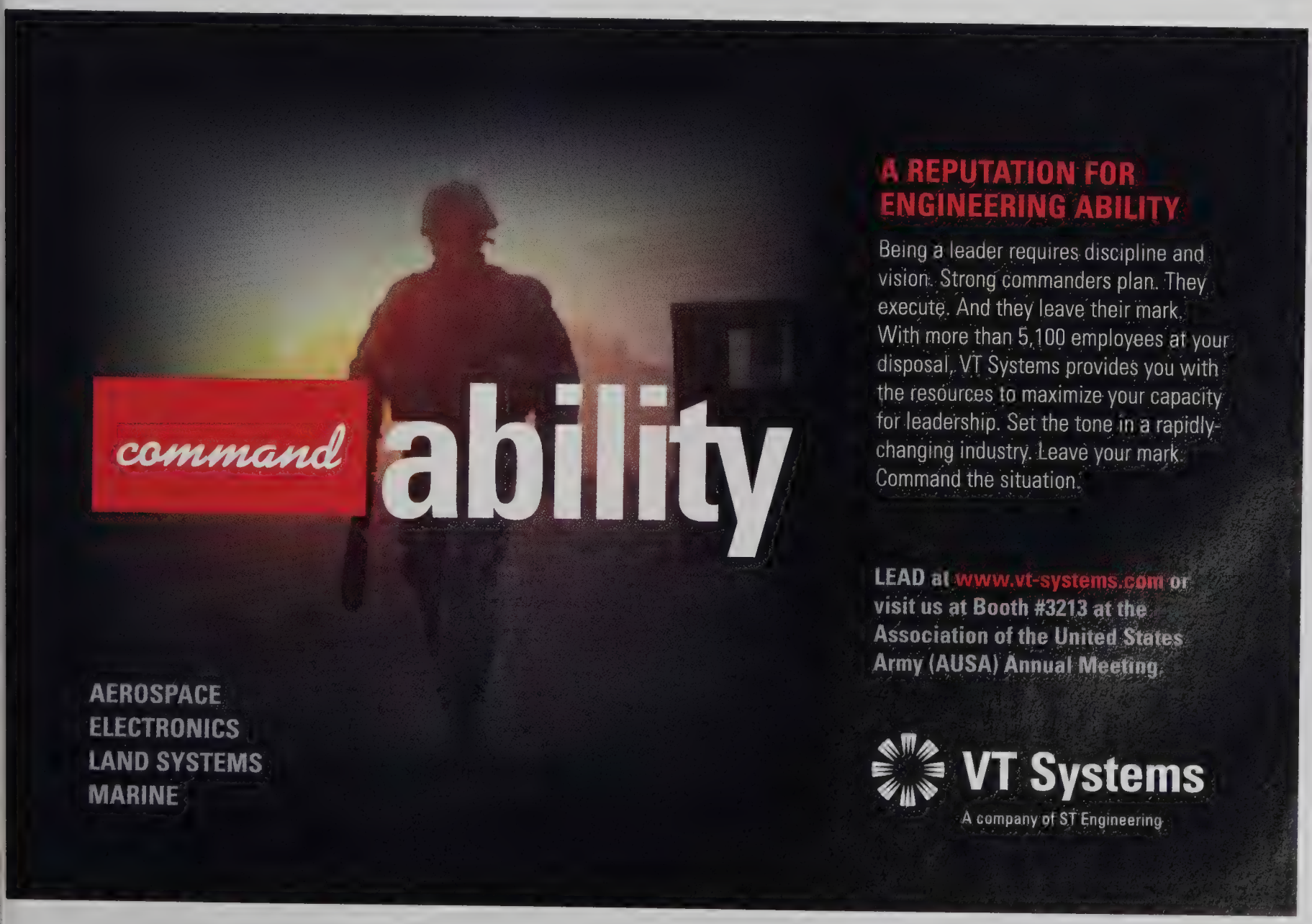
The M48 mask replaces the existing M43 blower with a portable lightweight motor blower (LWMB) that provides blown and filtered air for breathing, lens defogging and head cooling, thus enabling the aircrew to perform its mission in a CB environment both inside and outside the aircraft.

During flight operations, the LWMB will be mounted in the Apache cockpit in the same location as the M43 blower and can be quickly removed during an emergency egress procedure. The M48 was type-classified Standard A in 1996.

Collective Protection

The **Chemical-Biological Protective Shelter (CBPS)** replaces the M51 collective protection shelter. It consists of a lightweight multipurpose shelter mounted on an expanded-capacity variant Humvee and a 300-square-foot airbeam supported soft shelter.

The CBPS provides 72 hours of contami-



nation-free, environmentally controlled working area for medical, combat service and combat service support personnel to obtain relief from the need to continuously wear chemical-biological individual protective clothing. Medical equipment and crew gear are transported inside the LMS and additional medical equipment is carried on a towed high-mobility trailer.

An engineering change (EC) is being implemented to replace the hydraulic powered environmental support systems (Model 1) components and eliminate the need to use the Humvee engine. The EC will incorporate a self-powered electromechanical environmental support system (Model 2). A contract option has been exercised to procure 26 CBPS (Model 2) systems.

Chemically Protected Deployable Medical Support (CP DEPMEDS) is a containerized set that provides Army DEPMEDS combat support hospitals with a capability to sustain operations in an NBC environment.

This modular system integrates environmentally controlled collective protection elements into the hospital to reduce casualties and enhance combat effectiveness. CP DEPMEDS uses M28 collective protection equipment, power, waste and latrine management assets to provide an extended hospital capability.

The **M20A1 Simplified Collective Protection Equipment (SCPE)** provides a clean-air shelter for use against chemical and biological warfare agents and radioactive particles. The SCPE is an inflatable shelter which allows personnel to perform duties without wearing individual protection equipment. It can be used as a command, control, communication and intelligence shelter or as a soldier rest-and-relief facility.

Information Systems

The **Joint Warning and Reporting Network (JWARN)** is based on a commercial off-the-shelf software package developed by Bruhn New Tech. JWARN hazard prediction warning and reporting procedures for NBC attacks are based on standard NATO *Allied Technical Publication (ATP)-45* procedures. JWARN was designed to allow warfighters to determine and display NBC hazard areas resulting from the use of NBC weapon systems and dissemination devices. JWARN has the ability to provide hazard estimates of onset times and duration of hazard. JWARN also provides database management to store information used to warn units and can generate the standard ATP-45 message set and overlays. The program operates in exercise and operational modes.

ARMY BRIGADE COMBAT TEAM MODERNIZATION

The Army's modernization efforts are specifically designed to enhance and balance land force qualities by empowering soldiers with the decisive advantage across the continuum of full spectrum operations. Modernization is providing our soldiers and leaders with cutting-edge technology and capabilities to fight the wars we are in today while simultaneously preparing for future complex, dynamic threats. The Army is improving capabilities in intelligence, surveillance and reconnaissance; information sharing; and soldier protection to give our soldiers an unparalleled awareness of their operational environment, increased precision and lethality, and enhanced survivability.

The Army is addressing the capability gaps in our current force by accelerating delivery of advanced capabilities to all 73 Army brigade combat teams (BCTs). Much of this technology was derived from the Future Combat Systems (FCS) program; however, the Army is not limiting this new modernization approach to technology only from that program's efforts. As needed capabilities mature, they will be fielded in an incremental manner according to which BCTs need them the most.

The Army conducted intensive reviews of its acquisition programs, capabilities gaps, and warfighter requirements to develop a strategy to balance the force and modernize for the future. The Army, working with the Joint Staff and the Office of the Secretary of Defense, has developed a strategy and associated budget for upgrading and modernizing the force while allowing the Army to remain agile and globally responsive. The tough choices that resulted from this series of meetings provide an acquisition strategy that will enable the Army to balance between today's fight and future capability requirements while remaining adaptive to change.

Intelligence, surveillance and reconnaissance are capabilities that brigade- and battalion-level combatant commanders have asked for most often, and they need these capabilities brought down to the company and platoon levels. BCTs are structured around how the unit will fight as a system and how soldiers are trained to do so. The Army arms and equips the BCT accordingly. The way the Army will now field these capabilities to the BCTs is in alignment with the way the BCT is formed, trained and will eventually fight. Brigade sets of equipment that address these capabilities have emerged from the FCS effort, and the fielding of these sets of equipment has led to a change in the Army acquisition strategy.

This modernization effort is no longer about fielding 15 future BCTs; instead, critical technology and capability enhancements, which include network elements as well as a robust set of unmanned hardware and sensors, will be incrementally fielded to all Army BCTs, starting with the Infantry brigade combat teams (IBCTs). This fielding schedule will mean more equipment for more soldiers, faster.



"What was your favorite war?"

Army Evaluation Task Force (AETF)

The Army Evaluation Task Force (AETF) (5th Brigade, 1st Armored Division) is a U.S. Army Training and Doctrine Command tactical unit organized and structured to support the evaluation of modernization technologies. AETF is currently testing/evaluating equipment, allowing soldier feedback to take place early in the development process. This helps our developers make the adjustments that soldiers want and helps to mitigate potential costly and timely changes that typically occur late in the development cycle. AETF soldiers are currently training on equipment to be used during the technical-field-test/limited-user-testing cycles. Equipment is also in the process of being reset and tested in field and laboratory settings to support these upcoming tests.

The Network

The network is a layered system of computers and software, radios and sensors all interconnected within the BCT. The network is essential to delivering unified battle command and will be delivered to the Army's BCTs in increments. The first increment is currently in testing and will be delivered to the IBCTs in the form of network integration kits (B-Kits).

Why is this network important? Currently, there are many radio and computer systems all using different waveforms or software, which, at times, makes communication difficult. With uniform radios and software, the network under development will enable true unified battle command. Soldiers at every echelon will be connected to the proper sensor data and communication relays to ensure proper battlespace situational awareness. The network is also being tested and evaluated in a joint service operating environment to ensure the ability to integrate communications with joint service agencies and with our allies.

The network is being designed with five layers of protection and redundancy for nearly seamless data collection and transmission: sensor/platform layer, application layer, services layer, transport layer and standards layer. These layers provide diversity in waveform, frequency and environment to ensure there are multiple paths to transport data. Each network is tailored to support the specific needs of the end users. Depending upon the communication configuration, most users will be provided with multiple layers of access. Since full spectrum operating environments are not forgiving, when a layer of communication becomes unavailable to a node (due to increased range, obstructions and so on), the next best layer will be selected (with impacts on performance) to support the node's connectivity. Together, these layers provide seamless delivery of information.

The Network Integration Kit (B-Kit)

The **B-Kit** provides initial network connectivity to transfer sensor and communication data to and from existing tactical wheeled vehicles. The B-Kit consists of an integrated computer system hosting the communications and radio systems, limited battle command and systems-of-systems common operating environment software, and will be initially integrated onto the Humvee platform.

Common Controller (CC)

The **Common Controller (CC)** serves as a controller for many different BCT unmanned systems. Today the Army does not have a networked central control device for various unmanned platforms and sensors within the BCT. Still in development, the CC will provide that capability and will be incrementally fielded to the BCTs as it technologically matures.

The CC consolidates control of numerous systems into one integrated networked controller, reducing the logistics footprint on the battlefield and empowering the soldier with enhanced intelligence, surveillance and reconnaissance capability. It will also simplify training. The CC controls the Class I unmanned aerial vehicle (UAV), the multi-

Secure Communications

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functional utility/logistics and equipment (MULE) vehicle, the small unmanned ground vehicle (SUGV) and urban unattended ground sensors (U-UGS). The CC will communicate via the network in Spiral 2/3/4, and will perform selected training, logistics/maintenance, medical and other soldier functions.

Unattended Ground Sensors (UGS)

The **Unattended Ground Sensors (UGS)** program is divided into two major subgroups of sensing systems: AN/GSR-9 (V) 1 Tactical-UGS (T-UGS), which includes intelligence, surveillance and reconnaissance (ISR)-UGS and chemical, radiological and nuclear (CBRN)-UGS; and AN/GSR-10 (V) 1 Urban-UGS (U-UGS), also known as military operations in urban terrain (MOUT) advanced sensor system (UMASS).

The UGS are used to perform mission tasks such as perimeter defense, surveillance, target acquisition and situational awareness, including chemical, radiological, nuclear and early warning. A UGS field will include multimode sensors for target detection, location and classification, and an imaging capability for target identification. The sensor field also includes a gateway node to provide sensor fusion and a long-haul interoperable communications capability for transmitting target or situational awareness information to a remote operator or the common operating picture through the JTRS Network.

The U-UGS provide a low-cost, network-enabled reporting system for situational awareness and force protection in an urban setting. U-UGS also enable residual protection for cleared areas of MOUT environments. They are hand-employed by soldiers or robotic vehicles either inside or outside buildings and structures.

U-UGS support BCT operations by monitoring urban choke points such as corridors and stairwells as well as sewers, culverts and tunnels. U-UGS gateways provide urban situational awareness data, interfaced to JTRS networks. Soldiers involved in the testing of UGS have provided invaluable feedback, which was incorporated into new versions (form factors) that are now in final development and fielding.

Both urban and tactical UGS are part of early IBCT fielding and are in current evaluation by the Army Evaluation Task Force (AETF). They will be fielded to IBCTs starting in 2011. As additional sensor capabilities mature, they will be added during future incremental BCT fielding.

XM501 Non-Line-of-Sight Launch System (NLOS-LS)

The **XM501 Non-Line-of-Sight Launch System (NLOS-LS)** consists of a platform-independent container launch unit (CLU) with self-contained tactical fire-control electronics and software for remote and unmanned operations. Each CLU consists of a computer and communications system and 15 precision attack missiles (PAM). The NLOS-LS provides a rapidly deployable and network-linked precision-guided munitions launch capability that is currently not available within the Army.

PAMs are modular, multimission, guided missiles with two trajectories: a direct-fire or fast-attack trajectory, and a boost-glide trajectory. The missile receives target information prior to launch and can receive and respond to target location updates during flight. PAM supports laser-designated, laser-anointed and autonomous operation modes. The missiles are capable of transmitting near-real-time information in the form of target imagery prior to impact. PAMs are designed to defeat high-payoff light and heavy armored targets, either moving or stationary. The NLOS-LS, which has also successfully completed airdrops from a C130, is part of Spin Out 1 and will provide superior organic, non-line-of-sight fire capability and support for airborne units, special operations forces, and dismounted and mounted soldiers in any field.

The NLOS-LS is part of early IBCT fielding and is in current evaluation by the AETF. Successful PAM launches and CLU evaluations have recently taken place. NLOS-LS will be fielded to IBCTs and is being used by the U.S. Navy on its Littoral Combat Ships.

Ground Combat Vehicle (GCV)

The Army has shifted from the Future Combat Systems' manned ground vehicle development effort and is transitioning to a ground combat vehicle (GCV) platform informed by seven years of lessons learned in combat. The networked GCV will offer superior survivability while embracing state-of-the-art developments in mobility and power management functions. The Army is conducting analysis of available alternatives and developing requirements for the ground combat vehicle program. The objective is to field the vehicle system within the next five to seven years.

Unmanned Aerial Vehicles (UAV)

The **XM156 Class I Unmanned Aerial Vehicle (UAV)** is a platoon-level asset that provides the dismounted soldier with reconnaissance, surveillance, and target acquisition (RSTA) and laser designation. Total system weight, which includes the air vehicle, a control device and ground support equipment, is less than 51 pounds and is backpackable in two custom modular lightweight load-carrying equipment-type carriers.

The air vehicle operates in open, rolling, complex and urban terrains with a vertical take-off and landing capability. It is interoperable with select ground and air platforms and is controlled by mounted or dismounted soldiers. The Class I uses autonomous flight and navigation, but it will interact with the network and soldier to dynamically update routes and target information. It provides dedicated reconnaissance support and early warning to the smallest echelons of the BCT in environments not suited to larger assets.

The Class I system provides a hover-and-stare capability that is not currently available in the Army UAV inventory for urban and route surveillance. The Class I system also fills known gaps that exist in force operations such as force protection in counterinsurgency (COIN) operations, sol-



Unattended ground sensors (UGS)



Class I unmanned aerial vehicle

dier protection in COIN environments, joint urban operations abilities, enhanced ISR/RSTA capabilities, and hover-and-stare operations.

The Class I Block 0 UAV is part of early IBCT fielding and is in current evaluation by the Army Evaluation Task Force. As additional sensor capabilities mature, they will be added during future incremental Class I UAV fielding.

The **XM157 Class IV Unmanned Aerial Vehicle (UAV)** has a range and endurance appropriate for brigade-level ISR missions. It supports the BCT commander with communications relay, long-endurance persistent stare and wide-area surveillance.

Unique missions include dedicated manned and unmanned teaming with manned aviation; wideband communications relay; and standoff chemical, biological, radiological, nuclear detection with onboard processing. In addition, the Class IV UAV has the payload to enhance the RSTA capabilities by cross-cueing multiple sensors.

The Class IV can land without a dedicated air field. Development of this vehicle is shared with the Navy's Fire Scout program.

Unmanned Ground Vehicles (UGV)

The **XM1216 Small Unmanned Ground Vehicle (SUGV)** is a lightweight, soldier-portable unmanned ground vehicle (UGV) capable of conducting military operations in urban terrain, tunnels, sewers and caves. The SUGV aids in the performance of urban intelligence, surveillance and reconnaissance (ISR) missions, chemical/toxic industrial chemicals (TIC), toxic industrial materials (TIM) and reconnaissance.

Working to minimize soldiers' exposure directly to hazards, the SUGV's modular design allows multiple payloads to be integrated in a plug-and-play fashion. Weighing less than 30 pounds, it is capable of carrying up to 6 pounds of payload weight.

The SUGV is part of early IBCT fielding and is in current evaluation by the Army Evaluation Task Force. As additional sensor capabilities mature, they will be added during future incremental SUGV fielding.

The **Multifunctional Utility/Logistics and Equipment (MULE) Vehicle** is a 2.5-ton UGV that will support dismounted and air assault operations. The MULE is sling-loadable under military rotorcraft and features a common chassis. As the program's centerpiece, the common mobility platform chassis provides superior mobility built around an advanced propulsion and articulated suspension system. This system gives the MULE vehicle the ability to negotiate complex terrain, obstacles and gaps, which dismounted BCT squads will likely encounter.

The MULE's unique, highly advanced six-by-six independent articulated suspension, coupled with in-hub motors powering each wheel, provides extreme mobility in complex terrain, far exceeding that of vehicles utilizing more conventional suspension systems. It will climb at least a 1-meter step, far exceeding requirements, and provides the vehicle with the mobility performance and surefootedness required to safely follow dismounted troops over rough terrain, through rock and debris fields, and over urban rubble. This technology also allows the MULE to cross 1-meter gaps, traverse side slopes greater than 40 percent, ford water to depths over 0.5 meters and pass over obstacles as high as 0.5 meters, while compensating for varying payload weights and center-of-gravity locations.

Today two MULE variants are in development and will be incrementally fielded to the Army's BCTs.

The **Countermine MULE Vehicle (MULE-CM) (XM1218)** will provide the capability to detect, mark and neutralize antitank mines. The vehicle will be equipped with an integrated mine detection mission equipment package from the Ground Standoff Mine Detection System (GSTAMIDS).

The **ARV-A-L MULE Vehicle (XM1219)** will feature an integrated weapons and RSTA package to support the dismounted soldiers' efforts to locate and destroy enemy platforms and positions. The ARV-A-L will support both antitank and antipersonnel weapons platforms that will be remotely operated by network-linked soldiers.

Spin Out Early

Spin Out Early IBCT will provide enhanced warfighter capabilities to the current force.

Spin Out Early equipment provides enhanced situational awareness, force protection and lethality through the use of unattended and attended sensors and munitions. In addition, the soldier is provided improved communications through the B-Kit.

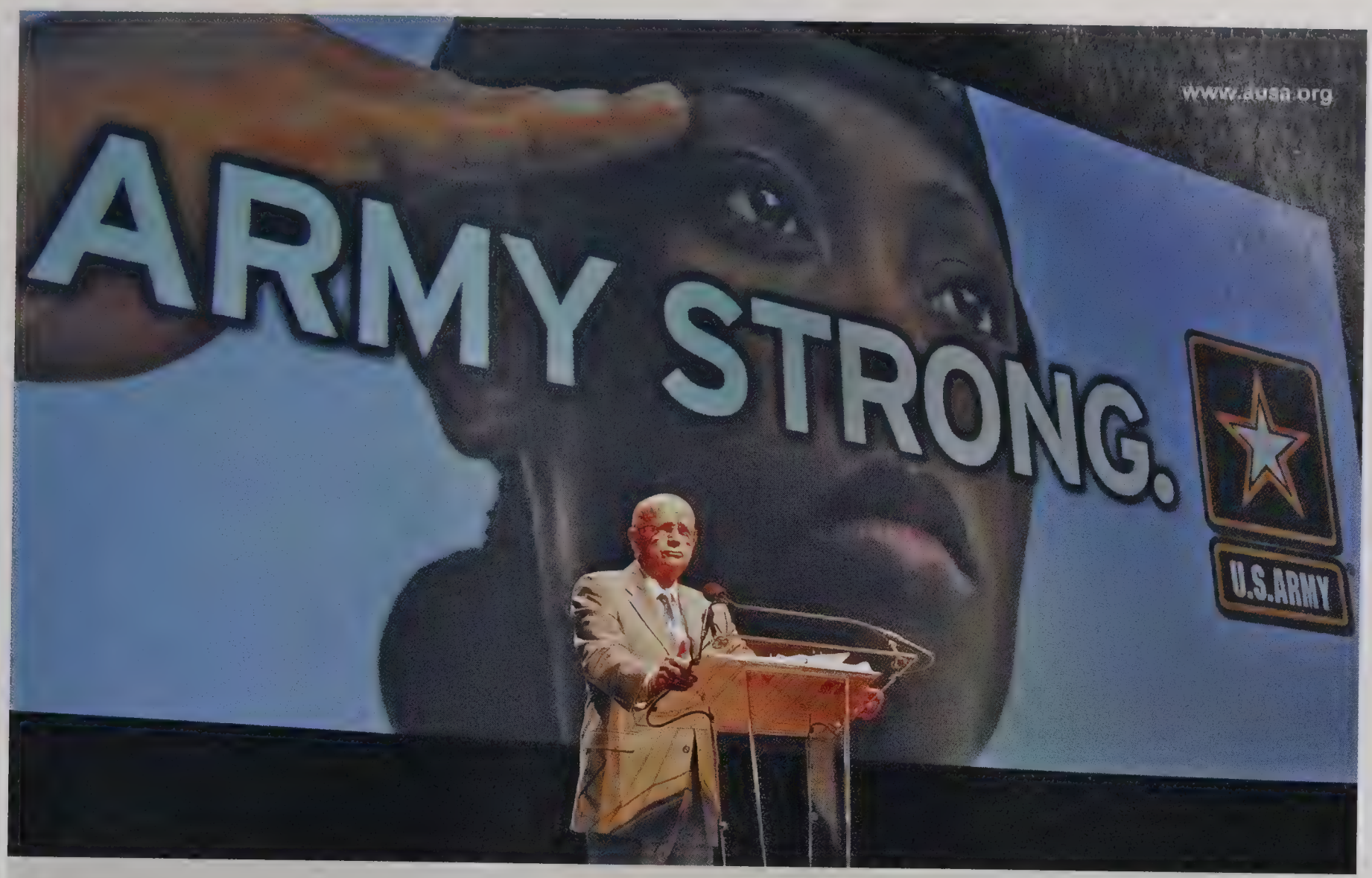


Multifunctional utility/logistics and equipment (MULE) vehicle

The Spin Out Early IBCT set will consist of the following systems: the Non-Line-of-Sight Launch System (NLOS-LS), Urban and Tactical Unattended Ground Systems (U/T UGS), Class 1 (Block 0) Unmanned Aerial System, and Small Unmanned Ground Vehicle (SUGV) Block 1. The Early IBCT systems will be fully integrated and networked through a Spin Out Network Integration Kit enabling the command and control of Spin Out systems, except for NLOS-LS, which is controlled through Advanced Field Artillery Tactical Data System systems. ★

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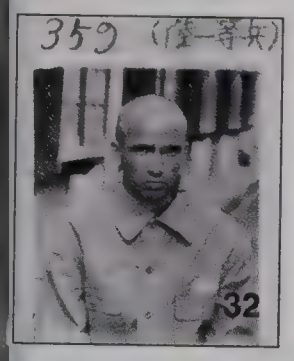
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Fort Leonard Wood: Worthy of Its Namesake
Photographs and text by Dennis Steele
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Sketches from Bataan and Beyond
Ben Steele's sketches and drawings document the horrors of the Bataan Death March and the 41 months he endured as a Japanese prisoner of war. ***Page 32***

Portrait of a POW *By Paul J. Greehalgh Jr.*
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Preserving America's Overseas Wartime Legacy *By MAJ Lillian Pfluke, USA Ret.*
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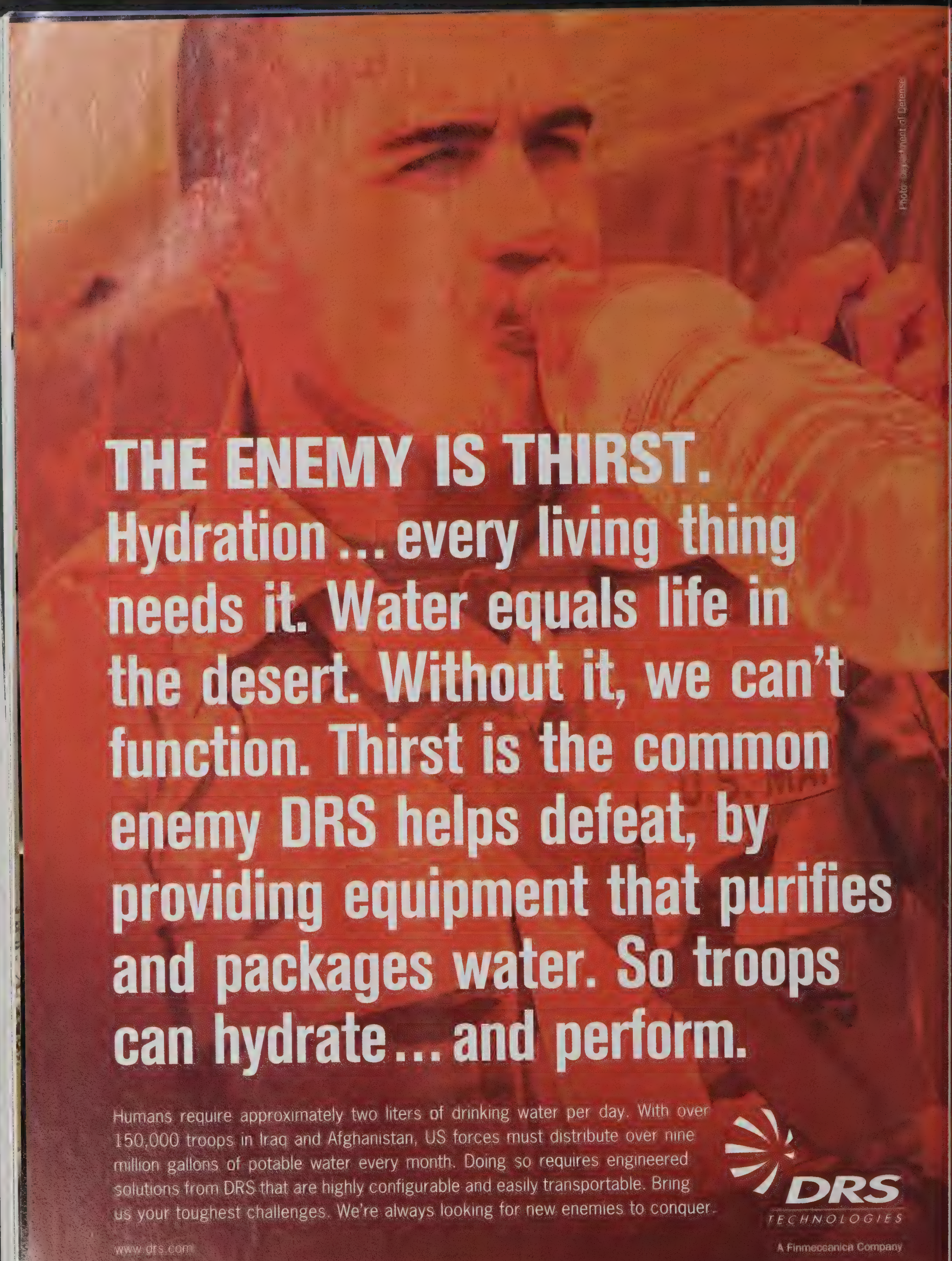
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The Patton Museum is a focal point for the training of all Armor soldiers at Fort Knox, Ky. ***Page 60***

BCT Modernization Reaches Critical Milestone *By Scott R. Gourley*
Soldiers from the 5th Brigade, 1st Armored Division (Army Evaluation Task Force), have begun limited user testing of the initial capabilities package of U.S. Army brigade combat team modernization at White Sands Missile Range, N.M. ***Page 65***

CompanyCommand—Building Combat-Ready Teams: Zero KIAs as an Organizational Goal?
Company commanders discuss the dangers of confusing the strategic mission with the desire to keep every soldier alive. ***Page 70***

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Letters

'Stryker Update'

■ The versatility of the Stryker vehicle family was underscored in Scott Gourley's August "Soldier Armed" column ("Stryker Update"). The Stryker has demonstrated its ability to accept continuous upgrades in response to emerging requirements generated by units in the field.

Improved armor, new floor plates, better seats and new-generation sensors are all examples of major upgrades to the Stryker. Without question, there will be more improvements in the future.

The Army is now looking at the redesign of its heavy brigade combat teams (HBCTs) based, in part, on the replacement of the aging M113s and eventually the Bradley fighting vehicle. As the article suggests, the Stryker medical evacuation vehicle could easily find a place in the HBCT alongside an upgraded Bradley and, someday, a new ground combat vehicle.

I remember back a decade or more to a time when the idea of a wheeled armored combat vehicle generated enormous opposition in defense circles. Not only has that opposition all but disappeared, but we are discovering new ways of employing Strykers.

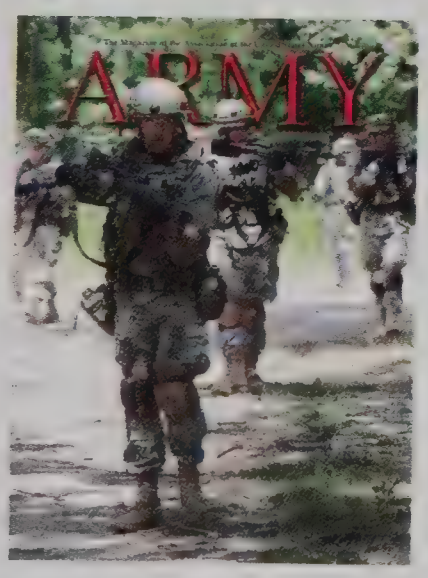
Without a doubt, the Stryker will be with the Army for decades to come.

Dr. Daniel Goure
Vice President
The Lexington Institute
Arlington, Va.

The Army Uniform

■ LTC Thomas D. Morgan, U.S. Army retired, makes a compelling argument for *not* wearing the Army combat uniform (ACU) at any military ceremonies, period ("Letters," September). I retired in 1987 (battle dress uniform era), and no Army personnel present at my formal retirement ceremony wore anything other than Class A greens. I served in the "brown shoe" Army for several years wearing olive drabs, "Ike" jacket, and shirt with tie at all ceremonies. We wore fatigues only for work details, kitchen patrol, field training and so on. At retreat, it was starched khakis with tie in summer and olive drabs with shirt and tie in winter. In my view, wearing the Class A uniform should be mandatory for *all* ceremonial occasions. In the September issue of ARMY Magazine, there are two examples of the right and wrong of Army dress: On page nine, SMA Kenneth Preston appears before Congress

This Month's Cover



Military police soldiers conduct patrol training at Fort Leonard Wood, Mo. Fort Leonard Wood, the Army's Maneuver Support Center, is home to the Military Police and the Army's engineer and chemical centers, and has grown to be an important joint training base and a center for federal, state and local first-responder training. Activities at Fort Leonard Wood are leading the counter-improvised explosive device warfare, and its schools and courses are preparing soldiers—from those going through basic combat training to those preparing for command—for the fight. It also has become a center for research, melding efforts by the military, academia and commercial defense partners to develop the next generation of high-tech systems. The story begins on page 22. *(Cover photograph by Dennis Steele)*

in proper uniform, and on page four, ACUs are worn at a D-Day memorial ceremony. Many new campaign and service ribbons, badges and so on have been added to our already impressive awards display. All Army personnel should wear these awards and ribbons with pride on a Class A uniform only—not stuck on a "utility" ACU jacket with velcro! Right on, LTC Morgan—the U.S. Army needs to dress up more (lose the beret) and look sharp once again.

SGM William (Bill) King Jr.,
USA Ret.
Orlando, Fla.

■ I wanted to express my complete agreement with LTC Morgan's letter in the September issue concerning the wearing of the ACU during the 65th D-Day anniversary. I had the same question when I read the D-Day article in the August issue of ARMY Magazine: Why weren't the attending soldiers in Class As? I definitely understand if paratroopers jumping in for the event are in ACUs, but the other soldiers being similarly attired shows bad taste and disrespect for a very solemn occasion.

It seems that Army decision makers' taste in uniforms has been in a continuous downward spiral over the years. During my first few years in the Army, we were allowed to wear items on the old "pickle," "cammies" and OG-107s such as our Recondo tabs, foreign jump wings and Jungle Expert badges, until

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that was deemed unacceptable by senior leadership. We made exceptional, progressive efforts to regain the maroon beret for paratroopers, but the headgear issue plummeted again during then-Chief of Staff GEN Eric K. Shinseki's great "black beret giveaway" fiasco.

When I had the honor to reenlist at the Pearl Harbor memorial by then-MG William E. Ward (an exceptional leader), we were required at that time to be in either Class As or Class Bs in order to render respect while on hallowed ground. It appears that senior Army leadership exercised poor judgment in the choice of uniforms for attendance at the D-Day event.

While I hope that the ACU is functional in a field environment, it fails to project a professional image for our soldiers. I think that we have a lot to learn from the marines regarding a striking, yet practical, uniform. The ACU "dresses down" our soldiers' appearance, and those outstanding men and women deserve much better.

SFC Mike Hainey, USA Ret.
Baghdad Embassy Security Force

■ I enjoyed reading the letter from LTC Thomas Morgan in the September issue. Having spent 37 years as part of the Army, 20 of those in the Pentagon, and now retired in "Military City, USA," I shudder every time I see sloppy soldiers running around in ACUs. I long for those days when "fatigues" were only worn on post and to and from home, and the soldiers one saw on the street were proudly dressed in Class A uniforms. I really shudder when a soldier shows up in church dressed in an ACU. Anyone who thinks one's attire does not affect one's pride is sadly mistaken.

I recognize that we cannot be too critical of the "out of proper uniform" soldiers we see here, since the Chief of Staff of the Army walks around the Pentagon, attends ceremonies and appears at the AUSA Annual Meeting attired in an ACU. People did not dress that way when I was in the Pentagon—our battles there did not require combat gear. Hopefully, Army leadership will soon instill self-respect in our troops once again.

C.A. Chase
Deputy Assistant Secretary of the Army, retired
San Antonio, Texas



SMA Kenneth Preston testifies in Congress.

U.S. Army

The 'Full Spectrum' NCO

■ Retired CSM Jimmie W. Spencer's article "Let's Return to the 'Full Spectrum' NCO" (June "Front & Center") was on target. In the early 1970s, I was a sergeant learning how to be a noncommissioned officer. The nation was busy extricating the Army from Vietnam, a war during which I and many others attained promotion through attrition. There came to pass a time when we woke up to the message that the Army was in shambles—it had lost much of its seasoned NCO Corps and subsequently much of its small-unit stability

and continuity. We needed to get about the business of restoring and rebuilding the NCO Corps. Something called the NCO Education System was established, and attendance was mandatory. Physical fitness was not optional. Tasks, conditions and standards became the norm for all training events, and a return to the basics of leading soldiers became a daily routine. The "new" NCO Corps was retaught that taking care of soldiers was neither an easy job nor one that could always be accomplished during regular duty hours.

The results of these actions are known by most who have an interest in warfighting readiness and professional military competency: an Army unlike any in the past. This professionalism was not obtained in a year or two, however. It took the better part of 20 years for those who were experts to put a stamp of approval on the finest NCO Corps anywhere. This accomplishment was not achieved easily, but I for one will support CSM Spencer's point of view that it was accomplished by ensuring that all NCOs were experts in the basics that are time-proven to provide the solid foundation for strong units and soldiers.

When the value of the basics is discounted or lost for whatever reasons, the foundation begins to weaken. The longer the basics are left unattended, the weaker the foundation becomes and the longer and more difficult the repair. So a question to be asked is, "Can the Army afford to wake up one day to another proclamation that 'We are broken and need another overhaul'?" I am concerned that if we do not make the corrections now, we risk losing the edge that this great Army has enjoyed for some time. As George Santayana said, "Those who cannot remember the past are condemned to repeat it."

CSM Bob Dare, USA Ret.
Duluth, Ga.

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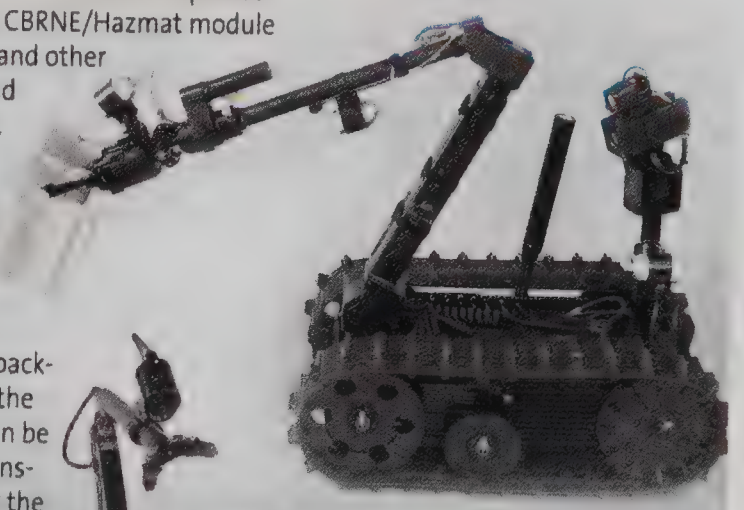
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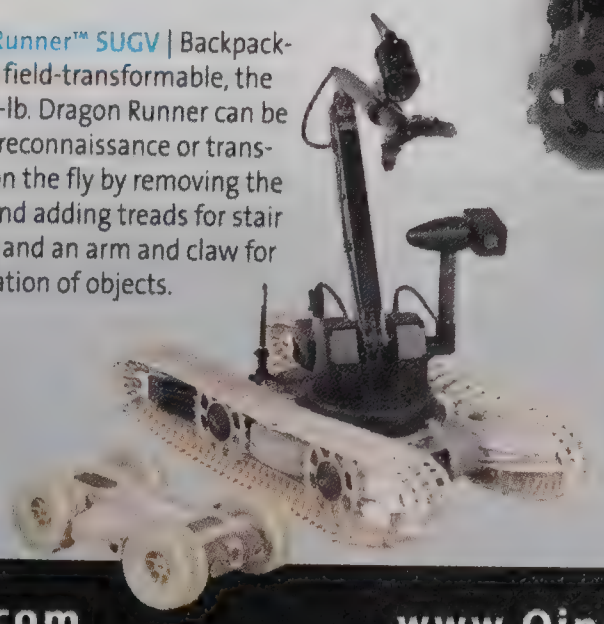
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Washington Report

John McHugh Confirmed as Secretary of the Army

The Senate confirmed by unanimous consent Rep. John M. McHugh (R-NY) as the 21st Secretary of the Army in September. As Secretary, McHugh is responsible for manpower, personnel, reserve affairs, weapons systems and equipment acquisition, and all other matters relating to the U.S. Army, including its annual budget and supplemental of more than $200 billion. He succeeds Pete Geren, who had held the position since July 2007.



President Obama nominated McHugh in July, and the Senate was prepared to approve him for the post. Kansas Senators Pat Roberts (R) and Sam Brownback (R), however, placed a hold on the nomination—as well as on those of all other defense and justice nominees—in an attempt to prohibit detainees from Guantanamo Bay, Cuba, from being transferred to the U.S. Disciplinary Barracks at Fort Leavenworth, Kan.

At the time of his appointment, Secretary McHugh was in his ninth term representing northern and central New York in the U.S. House of Representatives. He was the ranking member of the House Armed Services Committee and had earned a reputation as a strong supporter of soldiers and their families. McHugh, 61, was born in Watertown, N.Y., near Fort Drum, home of the 10th Mountain Division, and began his public service career in 1971 as the confidential assistant to Watertown's city manager. He served four terms in the New York State Senate before his election to the House of Representatives in 1992.

The Senate also unanimously confirmed Joseph Westphal, chancellor of the University of Maine system, as Under Secretary of the Army. Westphal, who was nominated in June, served as Assistant Secretary of the Army for Civil Works from 1998 to 2001. He succeeds Nelson M. Ford, who retired in January.

Defense Spending. As of early October, Congress had yet to pass a defense appropriations bill funding military operations for fiscal year (FY) 2010, which began on October 1. To avoid a government shutdown, Congress passed a continuing resolution that extended spending on most federal programs at current levels through October 31.

The Senate in October approved a $636 billion defense spending bill to fund military operations for FY 2010. Among the bill's provisions are:

- $128.2 billion to fund the wars in Iraq and Afghanistan, spending that was previously funded separately as supplementals.
- $2.5 billion to continue production of the C-17 cargo plane.
- $154 billion for operations and maintenance.
- $125 billion to fund salaries and other personnel costs.

The House of Representatives passed its defense spending bill in September. House and Senate negotiators ironed out their differences in October, and the House passed the compromise bill. A Senate vote was imminent as ARMY Magazine went to press.

GI Bill Benefits. Faced with more than 290,000 applications for the post-9/11 GI Bill, the Department of Veterans Affairs (VA) fell so far behind in delivering the benefits that VA Secretary, GEN Eric K. Shinseki, U.S. Army retired, announced in October that the VA would provide emergency checks of up to $3,000 to veteran-students who have applied for and not received their government stipends. Students can apply online (www.vba.va.gov) or can request courtesy transportation to one of the 57 VA regional benefits offices, where the emergency checks will be issued.

The funds are advance payments of the earned benefits and will be deducted from future payments. In the first two days of the program, which began on October 2, the VA worked with the Treasury Department to provide almost $70 million in advance benefits to more than 25,000 veterans.

In an editorial in *USA Today*, Secretary Shinseki said the department "faces legitimate criticism over the delays" and declared that he is "committed to fixing them." The VA has hired more processors, and Secretary Shinseki said the VA is working to ensure automated systems are in place for future delivery of the funds and is making adjustments in the process.

Kennedy Replacement Named. Paul G. Kirk Jr., a former chairman of the Democratic National Committee and a longtime friend of the late Sen. Edward M. Kennedy (D-MA), has been selected to temporarily fill the vacant U.S. Senate seat. Kirk will serve in the Senate until a special election is held in January 2010.

News Call

GEN McChrystal's Resource Request Under Review

In a report submitted to Secretary of Defense Robert M. Gates in September, GEN Stanley A. McChrystal, commander of U.S. Forces Afghanistan and commander of the International Security Assistance Force (ISAF), said that "additional resources are required" there and that "the status quo will lead to failure" unless insurgent momentum is reversed within the next 12 months. Secretary Gates has provided President Obama with an informal copy of GEN McChrystal's resource request.

"Time matters," GEN McChrystal urged, "we must act now." The number of troop deaths in Afghanistan has risen sharply in recent months, with 85 percent of the victims killed by improvised explosive devices. In his assessment, GEN McChrystal emphasized that in addition to more forces, ISAF "requires a new strategy that is credible to, and sustainable by, the Afghans."

"Success is still achievable," he said, but more troops are not enough. He recommended that ISAF conduct a comprehensive counterinsurgency campaign that interacts with the population and gains their support and trust by protecting them from violence and governmental corruption. In addition, ISAF must train and improve the caliber of Afghan security forces, gain the initiative from the insurgency and convince the Afghan people that their commitment is unwavering.

In July, GEN McChrystal issued a directive limiting use of force and has emphasized the importance of reducing civilian casualties. To help garner popular support, he favors shifting troops from remote outposts to more heavily populated areas, where they can help protect the civilian population. In mid-September, President Obama approved sending 2,500 to 3,000 noncombat troops known as "combat enablers" but is considering GEN McChrystal's report in conjunction with discussions with civilian and military leaders.



U.S. Air Force

M-ATVs Reach Afghanistan. *The first of more than 6,600 mine resistant ambush protected (MRAP) all-terrain vehicles (M-ATVs) to be fielded over the next year are offloaded from a C-17 Globemaster III at Bagram Airfield in October; seven of the vehicles were airlifted to Afghanistan. Smaller and more maneuverable than the conventional MRAP vehicle, the M-ATV can navigate Afghanistan's mountainous and often roadless terrain. It will replace the up-armored Humvee for mounted patrols, reconnaissance, convoy protection and other operations, and will support small-unit combat operations in rural and urban environments. The M-ATV carries up to four passengers and a gunner. Oshkosh Corp. was awarded the production contract last June.*

Odierno: Progress in Iraq. GEN Raymond T. Odierno, testifying on the operating environment in Iraq before the House Armed Services Committee in October, said he is "encouraged by the steady and deliberate progress" and that the drawdown of U.S. forces is on pace without sacrificing security. GEN Odierno, commander, Multi-National Force-Iraq, noted that challenges remain, including the long-standing tensions between Arabs and Kurds, but that Iraqi security forces have proved themselves capable as U.S. troops shift to a capacity-building role. Over the past two years, he said, attacks are down 85 percent, and military deaths are down 93 percent.

GEN Odierno expects about 120,000 troops remaining in Iraq by November and wants to maintain a force level of 110,000 to 120,000 until two months after national elections in January. The elections, he said, "are critical to determining the path that Iraq will take in the future."

Rather than bring in new troops as units redeploy, GEN Odierno would prefer to extend a very small number of troops. About 1,000 soldiers from the 1st Cavalry Division's Headquarters in Baghdad may be asked to extend up to 23 days. Depending on how the elections proceed, the United States will determine how to reduce troop levels to the 50,000 transition forces mandated by September 1, 2010.

On January 2, 2010, Multi-National Force-Iraq will combine six headquarters elements into a single headquarters called United States Forces-Iraq. The U.S. transition force, said GEN Odierno, will consist of three division headquarters and six brigades called "advise and assist" brigades (AABs). The units are brigade combat teams (BCTs) reconfigured to support civil development in Iraq. They will be

about the size of a BCT but will include more field-grade officers serving as advisors as well as more engineering, military police, civil affairs, transportation and other personnel who will focus on advising, assisting and developing Iraqi security forces.

The first four units assigned to the AAB mission are the 3rd Infantry Division's 1st and 2nd BCTs, based at Fort Stewart, Ga.; its 3rd BCT, from Fort Benning, Ga.; and the 3rd BCT, 4th Infantry Division, from Fort Carson, Colo., which is scheduled to deploy in spring 2010. The 3rd Infantry Division BCTs are deploying this fall; the division held a colors casing and retreat ceremony at Fort Stewart in early October.

Infantry Center Honors. The Association of the U.S. Army's director of noncommissioned officer and soldier programs, CSM Jimmie Spencer, U.S. Army retired, and one of its senior fellows, GEN John W. Foss, U.S. Army retired, were selected to receive the Infantry Center's highest honor, the Doughboy Award. The awards were presented at a dinner in their honor during the 2009 Infantry Conference at Fort Benning, Ga., in September.

"I am humbled to have my name be added to such an illustrious list of noncommissioned officers," CSM Spencer said. He noted that many friends and role models have been past recipients of the award. GEN Foss said, "I especially feel honored because of the great soldiers I served with through the many years. ... I loved my life as an infantryman through my 40 years of service."

Former chairman of the Joint Chiefs of Staff GEN Henry H. Shelton, U.S. Army retired, and retired CSM Gary L. Littrell, a Medal of Honor recipient, received the 2008 Doughboy Award.

Force-Structure Actions. The Department of the Army has announced the following force-structure actions, which are expected to be completed in September 2011.

The 1st Squadron, 6th Cavalry Brigade, will relocate from Fort Carson, Colo., to Fort Riley, Kan. The 70th Engineer Battalion will move from Fort Riley to White Sands Missile Range, N.M., and be redesignated as the 2nd Engineer Battalion.

At Fort Riley, the 1st Brigade, 1st Infantry Division, will convert to a modular heavy brigade combat team formation; to support that formation, the 2nd Battalion, 34th Armored Regiment; Delta Troop, 4th Cavalry Regiment; 1st Battalion, 5th Field Artillery Regiment; 5th Battalion, 16th Infantry Regiment; and 101st Combat Support Battalion will convert to modular force-structure design.

At Fort Irwin, Calif., the 79th Ordnance Company will activate, the 557th Maintenance Company will inactivate and the 669th Maintenance Company will convert to a modular design.

Additional force-structure and stationing actions at four installations will continue until complete in October 2011.

Fort Bragg, N.C.

Units to activate:
102nd Engineer Sapper Company
137th Engineer Sapper Company
919th Engineer Support Company
738th Engineer Support Company
919th Engineer Support Company
44th Medical Brigade
49th Quartermaster Tactical Water Distribution Platoon
Units to inactivate:
186th Quartermaster Company
600th Quartermaster Company
612th Quartermaster Company
44th Medical Command
1st Contingency Planning Team
270th Signal Company
Units to realign:
307th Engineer Battalion
101st Chemical Company
503rd Ordnance Company
11th Quartermaster Company
364th Quartermaster Supply Company
647th Quartermaster Company
127th Quartermaster Company
528th Medical Detachment
108th Air Defense Artillery Brigade Headquarters, XVIII Airborne Corps

Fort Campbell, Ky.

Units to inactivate:
196th Quartermaster Detachment
2-44th Maneuver and Air Missile Defense Battalion
106th Transportation, Headquarters and Headquarters Detachment
Unit to realign:
305th Supply Company

Fort Carson, Colo.

Units to activate:
247th Quartermaster Company
497th Engineer Company
544th Engineer Company
40th Engineer Detachment
Units to realign:
230th Finance Company
148th Military Police Detachment

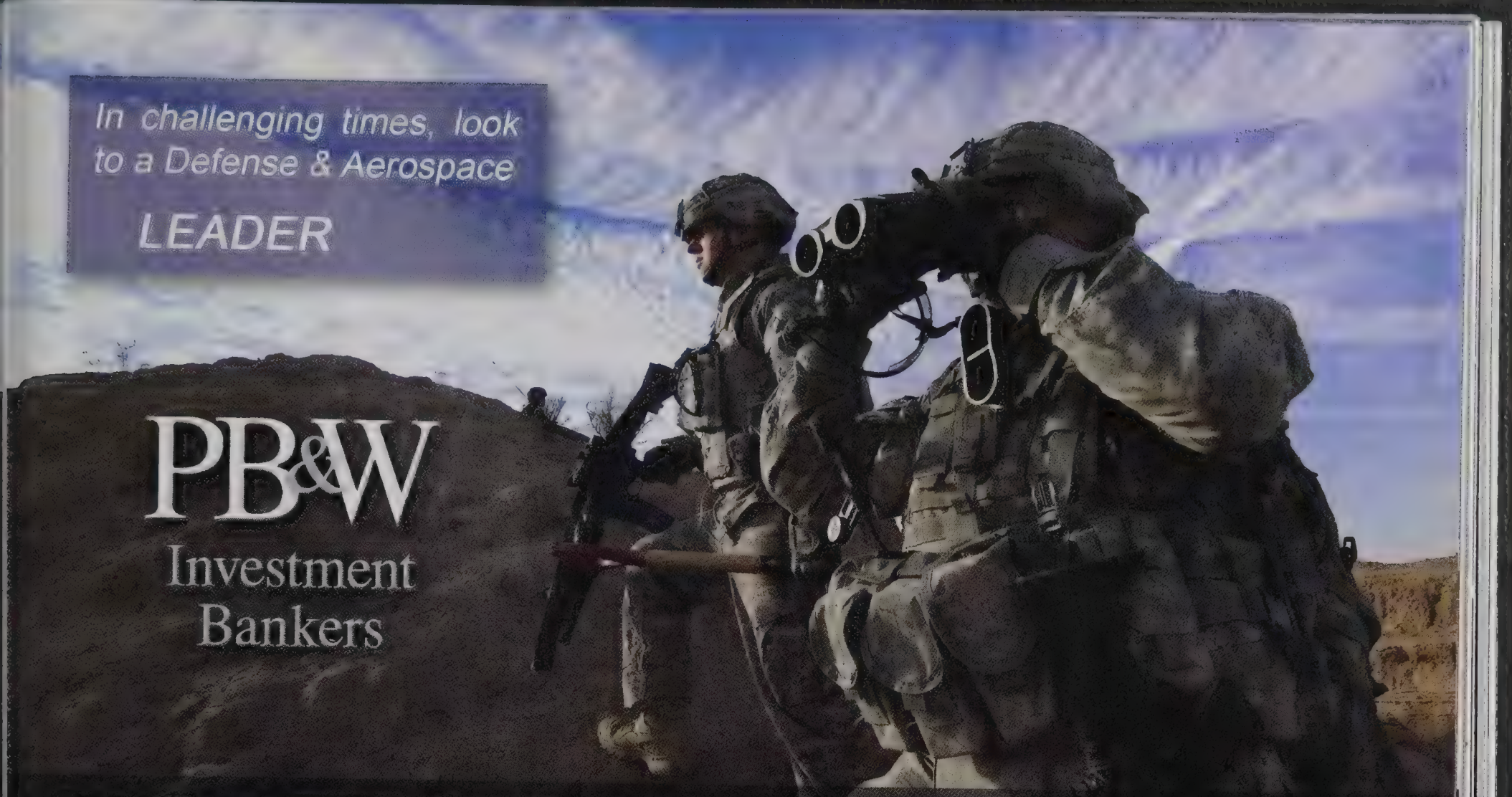
Fort Leavenworth, Kan.

Units to activate:
40th Military Police Battalion
165th Military Police Company

Two Die in the Philippines. SSG Jack M. Martin III, 26, and SFC Christopher D. Shaw, 37, members of Joint Special Operations Task Force-Philippines, were killed by an improvised explosive device believed to have been planted by al Qaeda-linked Abu Sayyaf militants in the Philippines in late September.

The soldiers died when their Humvee ran over the bomb while they were resupplying a school construction project on the island of Jolo, about 590 miles south of Manila, the capital. Abu Sayyaf has likely been responsible for many kidnappings, beheadings and bombings of Filipinos and foreigners in the south. Some 600 U.S. troops are stationed in the island nation, mostly in the south, where the Philippine military fights the Abu Sayyaf and the larger Southeast Asian terrorist group Jemaah Islamiyah. The soldiers were the first U.S. troops to die in an attack in the Philippines in seven years.

Deployments Extended. The Army has extended the Afghanistan rotations of the 82nd Airborne Division Headquarters, Fort Bragg, N.C., and the 3rd Combat Aviation Brigade (CAB), Fort



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Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from August 1 to September 30, 2009. All names have been released through the Department of Defense; families have been notified.

SSG Nekl B. Allen, 29
2LT Darryn D. Andrews, 34
SFC Bradley S. Bohle, 29
SSG Clayton P. Bowen, 29
PFC Jordan M. Brochu, 20
SPC Daniel L. Cox, 23
1SG Jose S.N. Crisostomo, 59
SSG Kurt R. Curtiss, 27
SSG Jason S. Dahlke, 29
SGT David A. Davis, 28
SPC Paul E. Dumont Jr., 23
SGT Jerry R. Evans Jr., 23
PVT Patrick S. Fitzgibbon, 19
SGT Robert D. Gordon II, 22
SPC Kevin J. Graham, 27
SFC Alejandro Granado, 42
CPT John L. Hallett III, 30
SGT Randy M. Haney, 27
PFC Eric W. Hario, 19
SGT Matthew L. Ingram, 25
CPT Cory J. Jenkins, 30
PFC Richard K. Jones, 21
SGT Tyler A. Juden, 23
SPC Corey J. Kowall, 20
SSG Andrew T. Lobosco, 29
SGT Youvert Loney, 28
CPT Ronald G. Luce Jr., 27
PFC Matthew M. Martinek, 20
SFC Shawn P. McCloskey, 33
SGT Andrew H. McConnell, 24
PFC William L. Meredith, 26
SPC Alexander J. Miller, 21
SSG Joshua M. Mills, 24
PFC Jeremiah J. Monroe, 31
CPL Darby T. Morin, 25
SSG Michael C. Murphrey, 25
1LT Tyler E. Parten, 24
SPC Justin R. Pellerin, 21
SGT Titus R. Reynolds, 23
CPL Nicholas R. Roush, 22
SFC Ronald W. Sawyer, 38
SGT Edward B. Smith, 30
SSG Tara J. Smith, 33
SFC Severin W. Summers III, 43
SPC Matthew K.S. Swanson, 20
CPT John Tinsley, 28
SPC Troy O. Tom, 21
SPC Demetrius L. Void, 20
PFC Morris L. Walker, 23
CPL Jonathan M. Walls, 27
SPC Tyler R. Walshe, 21
SPC Jonathan D. Welch, 19
SPC Abraham S. Wheeler III, 22
SPC Joseph V. White, 21
PFC Matthew E. Wildes, 18
PFC Dennis M. Williams, 24
SPC Damon G. Winkleman, 23
PFC Brian M. Wolverton, 21
SFC William B. Woods Jr., 31
1LT David T. Wright II, 26
PFC Jonathan C. Yanney, 20

Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from August 1 to September 30, 2009. All names have been released through the Department of Defense; families have been notified.

SPC Michael S. Cote Jr., 20
2LT Joseph D. Fortin, 22
SPC Matthew D. Hastings, 23
PFC Thomas F. Lyons, 20
PVT Taylor D. Marks, 19
PFC Zachary T. Myers, 21
SSG Johnny R. Polk, 39
SSG Todd W. Selge, 25
SPC Jordan M. Shay, 22
SSG Shannon M. Smith, 31
SFC Duane A. Thornsbury, 30
PFC William Z. Vanosdol, 23
SPC Richard A. Walters Jr., 41
SGT Earl D. Werner, 38
PVT Keiffer P. Wilhelm, 19

Stewart, Ga. The Division Special Troops Battalion, 82nd Airborne, which includes the headquarters of Combined Joint Task Force-82 in Bagram, will extend its deployment by approximately 50 days. MG Mike Scaparrotti, commanding general of 82nd Airborne, took responsibility of Regional Command East in June. The 3rd CAB will extend for 14 days.

The extensions are necessary to allow the units' replacements to accrue one year of dwell time before redeploying. The Army announced that the process will be managed to avoid any stop-loss for personnel. The replacement units are the 101st Airborne Division Headquarters, Fort Campbell, Ky., and the 10th Combat Aviation Brigade, Fort Drum, N.Y. The 101st, which returned in June from a 14-month rotation in Regional Command East, was slated to deploy in December 2010 after 18 months at home station; it will now deploy in late spring 2010, after a year at home. The 10th CAB, which returned from Afghanistan in October, will redeploy in the fall of 2010, after 12 months of dwell time.

These troop-rotation adjustments will strengthen continuity at the division-headquarters level in Afghanistan by returning headquarters units to areas with which they are already familiar. LTG J.D. Thurman, Army deputy chief of staff for operations, noted in the rotation announcement that the "adjustments to our force-flow strategy are an important element in supporting the commander of ISAF's [International Security Assistance Force] efforts to develop greater campaign continuity in regard to maximizing experience and stability in Operation Enduring Freedom." When the adjustments are complete, units will deploy at close to a one-to-two ratio—one year deployed and two years at home.

Best Inventions. U.S. Army Materiel Command recognized in September the "Top Ten Greatest Inventions of 2008." Held each year since 2002, the event recognizes technological advances fielded during the year. Soldiers in theater make the selections; this year, panels of soldiers from the 1st Armored Division, 82nd Airborne Division and 25th Infantry Division participated in the voting.

Among the lifesaving inventions was the Mine Resistant Ambush Protected (MRAP) Armor Weight Reduction Spiral Program, which introduced lightweight composites, new materials and enhanced ballistic mechanisms to reduce add-on weight of final armor packages. Another winner, the MRAP Expedient Armor Program Add-On-

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COMMAND SERGEANTS MAJOR CHANGES*

*Command sergeants major positions assigned to general officer commands.



CSM A. Coleman from CSTC-A to III Corps and Fort Hood, Fort Hood, Texas.



CSM T. Hawkins from SDDC to USTRANSCOM.



CSM V. Martinez from 2nd Stryker Cav. Rgt. to NTC.

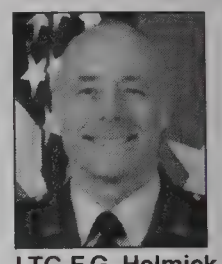
■ ***CSTC-A**—Combined Security Transition Command-Afghanistan; **NTC**—National Training Center; **SDDC**—Military Surface Deployment and Distribution Command; **USTRANSCOM**—U.S. Transportation Command.*

GENERAL OFFICER CHANGES*

*Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.



LTG J.D. Gardner from Dep. Cmdr., ALCC, Heidelberg, Germany, to Dep. Cmdr., EUCOM, Germany.



LTG F.G. Helmick from Cmdr., MNSTC-I/Cmdr., NTM-I, OIF, Iraq, to CG, XVIII Airborne Corps and Fort Bragg, Fort Bragg, N.C.



LTG M.P. Hertling from CG, 1st Armored Division/CG, MND-N, OIF, to CG, IET, TRADOC, Fort Monroe, Va.



LTG J.J. Schloesser from CG, 101st Airborne Division (AA) and Fort Campbell, Fort Campbell, Ky., to Dep. CG, USAREUR and Seventh Army, Germany.



MG P.M. Aylward, ARNG, from Dir., Jt. Staff, National Guard Bureau, Arlington, Va., to Dep. CG, Coalition, MNC-I, OIF.



MG D.A. Morris, USAR, from CG, USACAPOC(A), Fort Bragg, to Dep. Dir., Jt. Force Trainer for Doctrine and Jt. Capabilities Development, USJFCOM, Norfolk, Va.

Brigadier Generals: **I.N. Black**, USAR, from Staff Officer, TPU, 96th RRC, Salt Lake City, Utah, to Dep. Cmdr. (IMA), SDDC, Scott AFB, Ill.; **R.A. Carr** from Dep. CoS, Intel., ISAF, OEF, Afghanistan, to Dir. for Ops, DIA, Washington, D.C.; **D.J. Conboy**, USAR, from Dep. CG, TPU, 98th Div. (IET), 108th Training Cmd., Rochester, N.Y., to Asst. CoS (Wartime), Cmdr. (IMA), G-5, Eighth U.S. Army, Yongsan, Korea; **M.S. Linnington** from Cmdt. of Cadets, USMA, West Point, N.Y., to Chief, C/J-5, Headquarters ISAF Jt. Cmd, OEF; **J.R. McMahon** from Dir., J-7, Engineering, USF-A, OEF, to CG, U.S.A. Engineer Div., Northwestern, Portland, Ore.; **J.E. Phillips**, USAR, from Dep. Chief of Public Affairs, (IMA), Office of the Chief, Public Affairs, Washington, D.C., to Senior Cmdr., Fort Stewart, Fort Stewart, Ga.; **M.R. Smith**, USAR, from Dep. CG, 99th Regional Spt. Command, Fort Dix, N.J., to Dep. CG, CPATT, MNSTC-I, OIF.

■ ***AFB**—Air Force Base; **ALCC**—Allied Land Component Command; **ARNG**—Army National Guard; **CPATT**—Civilian Police Assistance Training Team; **DIA**—Defense Intelligence Agency; **EUCOM**—U.S. European Command; **IET**—Initial Entry Training; **IMA**—Individual Mobilization Augmentee; **ISAF**—International Security Assistance Force; **JCS**—The Joint Chiefs of Staff; **MNC-I**—Multi-National Corps-Iraq; **MND-N**—Multi-National Division-North; **MNSTC-I**—Multi-National Security Transition Command-Iraq; **NTM-I**—NATO Training Mission-Iraq; **OEF**—Operation Enduring Freedom; **OIF**—Operation Iraqi Freedom; **RRC**—Regional Readiness Command; **SDDC**—Surface Deployment Distribution Command; **TPU**—Troop Program Unit; **TRADOC**—U.S. Army Training and Doctrine Command; **USACAPOC(A)**—U.S. Army Civil Affairs and Psychological Operations Command (Airborne); **USAR**—U.S. Army Reserve; **USAREUR**—U.S. Army Europe; **USF-A**—U.S. Forces-Afghanistan; **USJFCOM**—U.S. Joint Forces Command; **USMA**—U.S. Military Academy.*

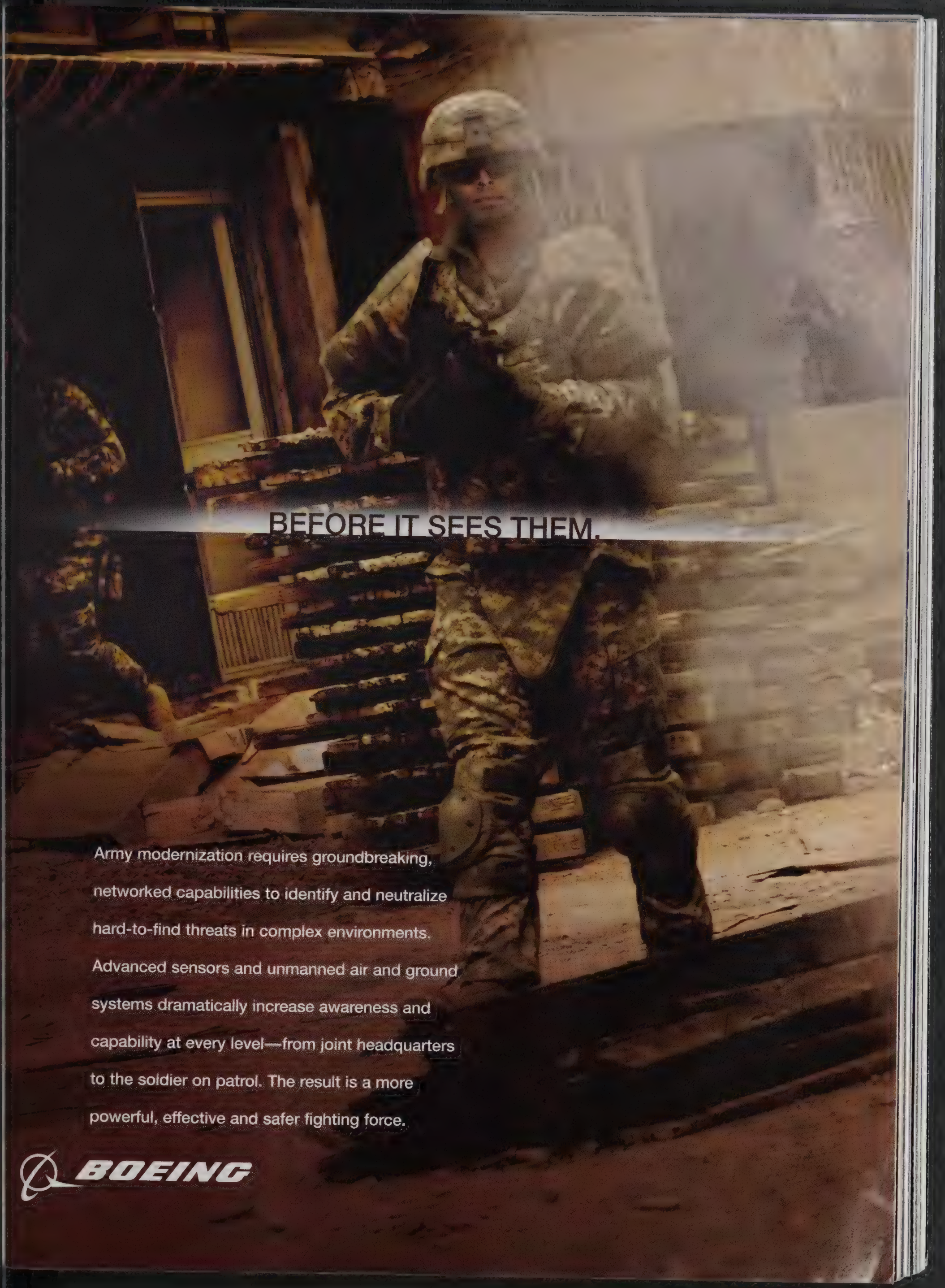
Armor Kit, uses armor physics to reduce the weight of the armor by half and helps protect MRAP vehicles from explosively formed penetrators. For a complete list of winners, visit www.army.mil and enter *inventions*.

New Rules for CSMs. A new career management system to begin in October 2010 means changes in the selection process and assignment procedures for command sergeants major (CSMs). The Army will hold CSM selection boards that will echo the current officer selection process; soldiers will be able to compete on equal terms with their peers across the Army. CSMs will be matched with commanders and assigned as a team: Following appointment, CSM selectees will be paired with new commanders; the Army anticipates that, as a team, they will attend a pre-command course at Fort Benning, Ga., or Fort Leavenworth, Kan.

The current practice of assigning promotable master sergeants and sergeants major (designees) to command sergeants major billets upon graduation from the Sergeants Major Academy and awarding them the 00Z military occupational specialty (MOS) will end. The appointment to CSM of soldiers who have not had experience as sergeants major in the field will be eliminated. (Selection procedures for CSMs who serve as senior enlisted advisors to general officer commanders will not change.)

Under new rules for "select-train-promote," academy graduates will be frocked or promoted and assigned to an initial tour as a sergeant major within their MOS for at least a year. During that year, they can compete for a battalion CSM position or key billet.

After completion of their assignments, CSMs can compete again for a battalion CSM or brigade CSM billet; they can serve multiple tours. Their skill levels will also change. Today both master sergeants and sergeants major hold skill level five, but the new rules will incorporate skill levels six, seven and eight into the military occupational specialties. Those who serve at lieutenant colonel or equivalent positions will hold a skill level six; those who serve at colonel or equivalent-level positions will hold skill level seven. Although at the battalion and brigade levels the 00Z MOS will be eliminated, that MOS will be awarded at skill level eight—general-officer level or equivalent. ★


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BOEING

Enduring Commitment

By GEN Frederick J. Kroesen
U.S. Army retired

In September, there were more than 260,000 American soldiers stationed in nearly 80 countries around the world, about half the authorized strength of the active Army force. They are engaged in missions that also demand the worldwide commitment of 100,000 Reservists and 200,000 contract personnel, and still the Army is rotating units and soldiers to the combat zones at an unhealthy pace.

Sorting out the active Army and Reserve soldiers committed to these missions is beyond the scope of this article, but the grand total of all national security requirements is a study of the enduring commitment for which the Army is responsible. What is generally not known—or not appreciated—are the details associated with those commitments.

First is the Army's commitment to its soldiers. In the last five years or so, the efforts and resources devoted to soldier welfare, family satisfaction and the well-being of wounded warriors is astonishing when compared with any previous era. But commitment has resulted in a "nondeployables" rate that has reached a reported 13 percent of the end strength. Wounded warriors, HIV-positive soldiers, soldiers on compassionate relief and so on add up to about 70,000 holes in the structure—spaces in units not filled with faces.

The problem was first addressed officially in 2004 when a "temporary" addition of 30,000 was authorized. In 2007, 35,000 more were added to build six more brigades, but in 2009, three brigades were abandoned to provide 10,000 soldiers to "fill holes," and another "temporary" addition of 22,000 was authorized in July. The added faces are welcome in deploying units, but they do nothing to relieve the too-rapid rotation requirements.

Another enduring commitment is to the "institutional" Army—Training and Doctrine Command; Army Materiel Command; Human Resources Command; Recruiting Command; the various headquarters, field operating and staff support agencies; and the soldiers manning Department of Defense positions are programmed to be about 95,000 but are almost always of greater strength. Many positions, particularly in higher headquarters, demand an overlap whereby a replacement reports and spends an orientation period with the departing soldier, learning on the job. Two filling one position means that a position somewhere else is empty. Individuals are shuffled in and out of those assignments, but the structure organizations are only seldom committed to the combat zone, and then only for specialized missions of a supporting nature.

Finally, we have those enduring commitments that account for part of the deployed forces: a brigade in the Sinai Desert for almost 30 years; a brigade's worth of aviation fighting the drug wars in Colombia for nine years; a 10-man medical detachment in Mongolia; Special Forces teams in the Philippines aiding, advising and supporting the suppression of a Muslim extremist organization in Mindanao; and 1,400 soldiers in armor, cavalry, aviation and medical units still in Kosovo after about 20 years. These are just a few examples of the mission requirements in those almost 80 countries where soldiers are now stationed. Exact accounting varies by the month, but the totals always amount to manpower unavailable for rotation into our war zones.

Enduring commitments exact a moral responsibility. Each mission cited was undertaken with the understanding that it was worthy and demanded fulfillment. Failure would undermine the credibility of the United States as a reliable partner in military enterprises. With few exceptions—the Vietnam War being the glaring example—we have achieved our objectives, kept our promises and established a reputation for reliability unexceeded in the world over the past 200 years. We have always had naysayers, most recently the "cut-and-run" advocates who insist that we leave Iraq and Afghanistan, but we have normally finished successfully every task, sometimes even spectacularly—for example, the World Wars and the operations in Panama and the Persian Gulf in the last century.

The secret to those great successes has always been a force equal to the task, sustained with adequate resources and an executive organization determined to win. Occasionally, even without full commitment to those three requirements, we have achieved satisfactory results—the Korean War is the prime example of settling for less while achieving remarkable results and gaining a still-grateful ally. Committing to the three imperatives, however, remains a much surer way to success.

Today's challenges—Iraq, Afghanistan and the global terrorism threat—demand answers to the same three questions: Are the forces adequate for the task? Are resources committed to sustain the effort? Is the executive establishment determined to win? The legacy we leave the next generations hangs on the answers. □

***GEN Frederick J. Kroesen**, USA Ret., is a former commander in chief of U.S. Army Europe and a senior fellow of AUSA's Institute of Land Warfare.*

The Strategic Debate We Really Should Be Having

By Richard Hart Sinnreich

In August, reacting to eroding public support of the war in Afghanistan, the Senate Foreign Relations Committee noted that "core questions about commitment and sacrifice can be answered only through a rigorous and informed national debate." A few weeks later, Joint Chiefs Chairman Adm. Mike Mullen endorsed that view, telling the American Legion's national convention, "I'd rather see us … argue about the war, struggling to get it right, than ignore it."

Both were right. But what we need even more is debate about a much larger strategic issue, of which Afghanistan is only one manifestation and, absent such a debate, probably not the last. That issue is how deeply the United States should involve itself in the world's underdeveloped and weakly governed—in some cases, such as Somalia, virtually ungoverned—states, and more particularly, how much that involvement should rely on the U.S. military.

Since 9/11, the prevailing view has been that, since such states often are the breeding grounds of terrorism, we have no choice but to involve ourselves in stabilizing them, with the help of allies if possible, but unilaterally if necessary. The alternative, in this view, is increased instability, extremist violence and ultimately the threat that perpetrators will acquire weapons of mass destruction.

There also is a contrary view, although so far it has achieved little political traction. That view holds, with John Quincy Adams, that the United States "goes not abroad, in search of monsters to destroy. She is the well-wisher to the freedom and independence of all. She is the champion and vindicator only of her own." In that view, it was precisely America's unwelcome military intrusions abroad, especially in the Muslim world, that gestated and continue to motivate al Qaeda and its ilk.

At the heart of this debate is disagreement about whether and how the United States should continue to exert global leadership. On one side are those who ask, "If not we, then who?" On the other are those who remind us that the Cold War is over and argue that military overcommitment has contributed materially to turning America into a debtor nation with an exploding deficit and little immediate prospect of recovering the economic and financial preeminence we once enjoyed.

At the turn of the 20th century, Great Britain reacted to analogous circumstances—including the Second Boer War, which was even more traumatic for Britons than Iraq and Afghanistan have been for us—by reconciling with traditional great-power adversaries France and Russia, redeploying and modernizing the Royal Navy and reorienting the British army from its longtime preoccupation with colonial policing to war against a major modern adversary.

Since, like some Americans today, many late-19th-century Britons were wedded to what they saw as Britain's civilizing mission, those changes were by no means uniformly welcomed. British leaders made them anyway. It was just as well that they did. Had they not managed to discipline Britain's commitments, their descendents probably would be speaking German.

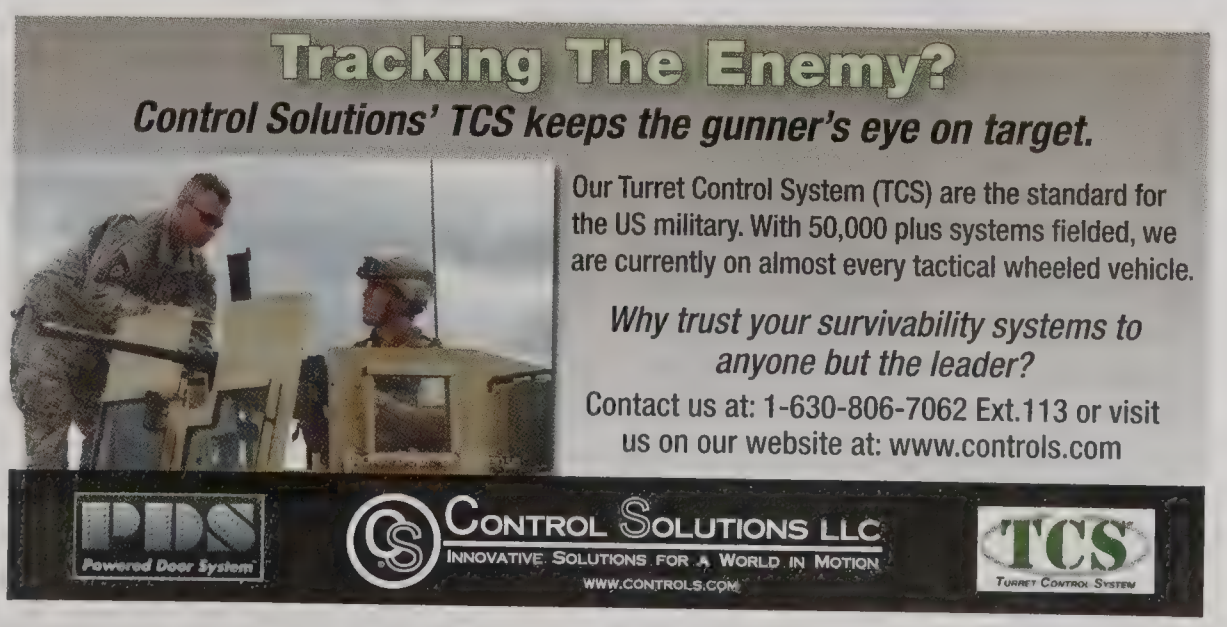
We aren't Victorian Britons. But few would disagree that we confront today a similar problem of strategic overstretch in an international environment in which neither our reputation nor our power carries the persuasive or deterrent weight that it once did. The question that needs above all to be debated is what to do about it.

Those who would frame that debate as a contest between continued overseas engagement and a return to isolationism trivialize the problem. Neither our continued economic prosperity nor our sense of international responsibility would permit us to withdraw altogether from involvement with the rest of the world, including its underdeveloped regions.

Instead, the real questions have to do with the terms of that continued involvement, and in particular, to what extent it should be unilateral and military in character, rather than multilateral and, excluding outright aggression against ourselves or an ally, conducted largely if not exclusively by nonmilitary means.

It doesn't help in that regard that, since 9/11, we've managed to create a vocal institutional and political constituency for turning the U.S. military into a nation-building agency.

Once upon a time, we called that "civilizing 'em with a Krag," referring to the U.S. military rifle of the time. Victorian Britons cherished similar ambitions, satirized by Hilaire Belloc's cynical 1898 ditty: "Whatever happens, we have got/the Maxim gun, and they have not." Neither enterprise, it should be noted, proved enduringly successful.



We probably should debate what our goals in Afghanistan should be and what price we should be willing to pay to achieve them. But the debate we really should be having at the outset of the new administration is about how the United States can bring its strategic ambitions and resources back into some kind of balance. Else, one day, we, too, could end up speaking another tongue. □

***Richard Hart Sinnreich** writes regularly for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the September 13, 2009* Lawton Constitution *and is reprinted by permission of the author.*

Leader-Team Training

By LTG James M. Dubik
U.S. Army retired

All good commanders want to encourage their subordinates to use their initiative within the overall intent. Such commanders also seek to build trust and cohesion among their leaders and to accelerate the speed of the decision-action cycle within their units. Both of these skills are necessary in any war, but especially so in the fast-changing environment in which we are fighting today.

When we stood up the first Stryker brigade combat team (SBCT) at Fort Lewis, Wash., in 1999, we had envisioned an organization marked by trust, cohesion, high initiative and speed of decision-action at all levels. From the Army's advanced warfighting experiments conducted throughout the 1990s with the 4th Infantry Division, the Army's first "digital division," we learned about the kind of network and information tools we would have to insert into Stryker formations to facilitate initiative and speed. What we needed, however, was a set of leaders who could maximize the potential of the network and the tools we would field. So we devised an innovative methodology to create these kinds of leaders within SBCTs; we called it leader-team training.

Leader-team training was predicated on the doctrine that every commander must operate within the intent not only of his immediate boss, but also of his boss's boss. Applying this two-up/two-down leader doctrine results in the understanding that every commander is a member of several leader-teams. Company commanders, for example, are the last rung in the brigade commander/battalion commander/company commander leader-team, in which company commanders are expected to operate within the intent not only of a battalion commander, but also of a brigade commander. Company commanders are also the middle rung in the battalion commander/company commander/platoon leader leader-team. And they are the top rung of the company commander/platoon leader/squad leader leader-team.

Leader-team training was designed to teach subordinates how to think and decide as their seniors do. It is just not enough for a senior commander to say, "I want my subordinates to use their initiative" or "We need to make decisions and take action faster." Senior commanders must teach their subordinates *how* to do these things. Only the proper training of junior officers increases the probability that subordinates will use initiative within their seniors' intent. Moreover, a unit staffed with such officers increases the speed of decision and action throughout the organization. In addition, if a similar approach is used in the training of its noncommissioned officers, a unit achieves a level of leadership cohesion and trust that increases initiative and speed even further.

The first day of Stryker leader-team training focused on the brigade level. The brigade commander taught the brigade's battalion and company commanders. (Occasionally command sergeants major and first sergeants attended.) The commander normally selected at least two scenarios, one for the morning and one for the afternoon. The session started with the brigade commander presenting a scenario—one that he had faced or would likely face—selected from the four leadership skills described in Army doctrine—tactical, technical, conceptual and interpersonal. Thus the commander sometimes presented a tactical scenario—offense, defense, stability, support or some combination; or a technical scenario such as management of brigade systems; or a conceptual scenario that highlighted the upfront thinking a brigade commander often has to do before issuing orders or directives; or an interpersonal scenario that might focus on family support activities. With the brigade commander as the "teacher," each scenario was at the brigade level, and each contained enough details to facilitate discussion.

After presenting the scenario, which might involve simulations, the brigade commander divided his subordinates into several teams. Sometimes he would put all battalion commanders in one team, all of the Alpha company commanders in a second, Bravos in a third, Charlies in a fourth, and so on. Other times, he would leave a battalion commander and the battalion's company commanders together, or he would keep the company commanders of a battalion together, but switch battalion commanders. The choice depended on what leadership lessons the brigade commander wanted to teach. Each team then spent several hours discussing its solution to the problem presented in the brigade commander's scenario.

The next step was the backbriefs. After the teams came back together, the brigade commander selected one or more leaders to brief their solutions to the entire group. The group then discussed the team's solution: what they thought would work and why; and what they thought would not work and why. Explaining rationale was important because it gave the brigade commander the opportunity to lead a discussion about how brigade-level commanders processed problems at

their level. Over time, such leader-team discussions started to produce a set of battalion and company commanders who could think, decide and act like brigade commanders.

Day two of SBCT leader-team training was organized similarly, but at the battalion level. Each of the SBCT battalion commanders gathered their company commanders and platoon leaders together, sometimes including first sergeants and platoon sergeants, but not always. Now the focus was on battalion-level scenarios highlighting one or more of the four leadership skills. As with brigade-level leader-team training, subordinates were divided into groups in various ways, then given a chance to discuss solutions to the problem embedded in the battalion-level scenario. Again, the discussion was focused both on "what" and "why." Day three concerned the company level: Company commanders presented scenarios to their platoon leaders and squad leaders and conducted the same group discussion and backbriefs as with the brigade- and battalion-level leader-team training.

Over time—especially in conjunction with field training, situational training, command post exercises and other leader forums—these leader-team training sessions helped produce junior leaders who understood how their seniors had to think, decide and act. This understanding increased the probability of the junior officers correctly using their initiative within the intent of their seniors, and therefore increased the speed of the decision-action cycle at all levels of the brigade. Finally, this understanding spread to every level of leadership in the formation and created a very cohesive set of leaders who trusted each other.

These were the kind of leader-teams that we wanted to outfit with the SBCT's network and information tools. They would not slow the network down because of an overcentralized leadership style or an overly methodical decision style. Rather, their understanding of one another and the cohesion and trust that results from that understanding made the network operate even faster than we had envisioned.

Stryker brigade combat teams have been the unit of choice in Iraq for some time. Soon they will debut in Afghanistan and no doubt quickly become the unit of choice there as well. Certainly, the Stryker family of vehicles, the network around which the brigade combat team is designed, and the number of subordinate units and amount of Infantry all contribute to SBCTs' usefulness in so many different situations. More important is this: Cohesive SBCT leader-teams generate the trust, initiative, speed and adaptability needed in war.

The leader-team approach, based upon Army leadership and operational doctrine, is applicable to a much wider audience than SBCTs. U.S. European Command, for example, is having some success with this approach through the Fort Leavenworth, Kan., team-of-leaders pilot program. The leader-team approach, however, is not yet documented as a leader-development methodology in our doctrine. Almost everyone agrees that future operating conditions will be even more ambiguous than today's. Almost all agree that leader cohesion, trust, initiative, speed of decision and action, and adaptability are keys to success in those ambiguous conditions. Maybe it is time to bring together sets of leaders—officers and NCOs—and determine the right way to document leader-team training en route to promulgating this approach throughout the Army. □

***LTG James M. Dubik**, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.*

Bringing the Military Revolution to Afghanistan

By William R. Hawkins

The Second Afghan War of the 19th century was fought from 1878 to 1880. Lessons from that conflict can be applied to the current conflict in Afghanistan.

The campaign that brought the war to a successful conclusion for the intervening British in 1880 was the famous march from Kabul to Kandahar by Maj. Gen. Frederick Roberts, with 10,000 men formed into four brigades. Artillery was limited to three batteries of mountain guns packed on mules for the sake of speed. The much larger Afghan rebel army abandoned its siege of Kandahar when Roberts approached and took up prepared positions around a nearby village. Roberts sent his cavalry brigade on a flanking maneuver, but a frontal attack by two infantry brigades put the enemy to rout. The British force lost 60 killed and 190 wounded in two days of fighting. The Afghans left 600 bodies and all their artillery on the field. Hundreds more of the enemy died during the pursuit and from wounds.

Roberts was elevated to a baronetcy, thanked by Queen Victoria and both houses of Parliament, and given a number of other honors, including a cash award. His casualties were considered light. Today the United Kingdom has 9,000 soldiers in Afghanistan, and a debate is raging back home over the supposedly fierce fighting and mounting casualties since Operation Panther's Claw was launched this summer in Helmand Province. The London *Times* called the deaths of 15 British soldiers from August 1 to 25 "extremely heavy." The loss of 41 American lives during the same period provoked similar criticism of the war effort in media and political circles.

The current war has had bipartisan support because it was in Afghanistan that the attacks on 9/11 were planned. But after eight years of fighting, public support is beginning to wane. American ground forces are still spread thin

despite the end of the surge in Iraq, and there is little chance of expanded troop deployments by NATO countries. Estimates that it may take another decade—or longer—to stabilize the country raise real questions of whether Western military commitments can be maintained long enough to "win" the war.

Victory will be measured by a reduction in violence, not its cessation. Terrorism and insurgency will continue along the Afghanistan-Pakistan border as it has for centuries. As F.G. Cardew stated in his 1903 book *The Bengal Native Army* with regard to the North-West frontier with Afghanistan, "Service on the Indian frontier offers more experience of active soldiering than is to be found in any position elsewhere."

A century ago, Pakistan was part of British-ruled India, and British forces were based south of the Khyber Pass, rather than north of it as they are today. In the 19th century, the British relied on locally raised forces to keep the persistent violence of the region from escalating to a level that could threaten central authority. NATO must do the same again now; the center of gravity in Afghanistan remains the "Pashtun Belt" that runs along both sides of the border with Pakistan.

Roberts' four brigades were all organized on the basis of one battalion of British troops and three battalions of local troops led by British officers. The two brigades that routed the rebel Afghans were the 1st Brigade with the 92nd Gordon Highlanders, 23rd and 24th Bengal Infantry (Punjab Muslims), and the 2nd Gurkha regiments; the 2nd Brigade with the 72nd Seaforth Highlanders, 2nd and 3rd Sikh Infantry, and the 5th Gurkha regiments. Roberts' cavalry brigade had the 9th Queen's Royal Lancers, the 3rd Bengal Cavalry, 3rd Punjab Cavalry and the Central India Horse regiments. There are some signs that the British may return to a form of partnering with Afghan forces in a revised approach to the current conflict.

In a September speech to the International Institute for Strategic Studies, Prime Minister Gordon Brown said, "To increase the quality and effectiveness of the new Afghan forces would require a new approach, shifting from mentoring—where small numbers of mentors work with Afghan units—to one of partnering, where the bulk of our combat forces would be dedicated to working side by side with the Afghan army at all levels—where British troops would eat, sleep, live, train, plan and fight together with their Afghan partners to bring security to the population."

Brown also called for a more rapid increase in Afghan fighting strength. He noted, "In the spring, NATO announced that we would support the expansion of the Afghan army from 80,000 to 134,000 by November 2011. That training is already proceeding at the rate of 2,000 new troops per month. And Britain would also support a more ambitious target of 134,000 by an earlier date of November 2010—which would mean increasing the rate of training to 4,000 per month." This is still a very modest effort so late in the war.

American commanders are also placing more emphasis on raising local forces. GEN David H. Petraeus of U.S. Central Command testified to the Senate Armed Services Committee in April: "We recognize the fact that international forces must eventually transfer security responsibility to Afghan security forces. To do this, we must significantly expand the size and capacity of the Afghan forces so they are more able to meet their country's security needs. A properly sized, trained and equipped Afghanistan national security force is a prerequisite for any eventual drawdown of international forces from Afghanistan." In his September recommendation, GEN Stanley A. McChrystal, the U.S. and NATO commander in Afghanistan, called for a greater emphasis on nation building—the first task of which must be expanding the Afghan army.

American strategists have had a difficult time overcoming the short-term expedient of using the highly proficient U.S. and NATO forces to combat the enemy rather than train local forces for the long-term needs of counterinsurgency and national security. One of the neglected lessons of the Vietnam War was the failure to build a South Vietnamese military that could rival that of North Vietnam before a changing U.S. political climate forced a withdrawal of American ground forces.

A strategy based on power projection from "over the horizon"—using air and missile strikes and the occasional raid by Special Forces—would be inadequate to maintain order in Afghanistan or U.S. influence in Pakistan. Some U.S. and NATO boots on the ground will be needed for quite some time, but they cannot be the main army because they cannot be sustained in sufficient number. They are a necessary support for local forces, but they cannot be a substitute for local forces as they have been.

Afghanistan needs the kind of military revolution that allowed the British to build a powerful local army in India and to leave behind a strong central authority in Kabul when London withdrew its forces in the wake of Roberts' victory in 1880. The British left Abdur Rahman as amir, who had at his disposal a national army that was able to put down several rebellions, including winning another battle outside Kandahar in 1881. Britain controlled his foreign policy, but Rahman ran the country's domestic affairs. His rule became strong enough that by 1896 he was able to institute a form of conscription that further strengthened the national government at the expense of local warlords. When he died in 1901, there was a peaceful succession for the first time in generations. As Afghanistan incubates a democratic system, the need for a professional military that can remain steady during many political crises is vital.

Stephen Peter Rosen, in his study *Societies and Military Power: India and Its Armies,* compares what the British accomplished in India to what happened in Europe during the late 16th and 17th centuries in what has been called the military revolution. The de-

velopment of professional armies transcended the fragmented societies from which they were recruited. "The British accomplished this by separating their armies from Indian society, not by changing Indian social structures," argues Rosen. Over time, Indian society did change, but the armed forces were ahead of the curve.

What was the basis for Sikh, Muslim, Hindu and Gurkha allegiance to the British raj? The key element was the personal character and interaction of the British and local soldiers. If they held each other's respect, they would work together. Unit cohesion based on honor, duty and loyalty among comrades in arms overcame more parochial concerns.

The grand strategic factor behind the military revolution was money to pay for a national army. The central governments in both Europe and India had to outbid feudal landowners and warlords for manpower, train the recruits and impart to them the ethos of professional soldiering; they then had to purchase the superior arms needed to give the government forces the edge on the battlefield. The expedient of hiring or subsidizing warlords to provide security had to be replaced by the central recruiting and organizing of a force that could overawe the private militias. Local moguls had to be made content to serve the national government rather than fight it.

As early as 1795, the directors of the East India Company stated that "the leading principle of the Company's government should be that the pay of the soldier ought never to be in arrears; while there was a rupee in the treasury, he was to be paid, every other article of expenditure being postponed to that consideration." The event that brought Roberts to Kabul in the first place was the 1879 murder of British envoy Maj. Pierre Cavagnari by rebellious Afghan soldiers who had not been paid. It should be noted that Cavagnari's escort, a company of the elite Guides regiment recruited in the Peshawar Valley, fought to the last man against the Afghan mutineers.

The military revolution in Europe and India was paid for by an expansion of commerce and industry that swelled tax revenues. Afghanistan is an extremely poor country whose major cash crop is opium, which the West does not want to see flourish. Thus foreign aid will have to be a substantial supplement to local finances. It should, however, be politically easier to spend treasure rather than blood in a distant campaign waged by mainly local forces for what will likely be a very long time. □

***William R. Hawkins** is a consultant specializing in international economic and national security issues.*

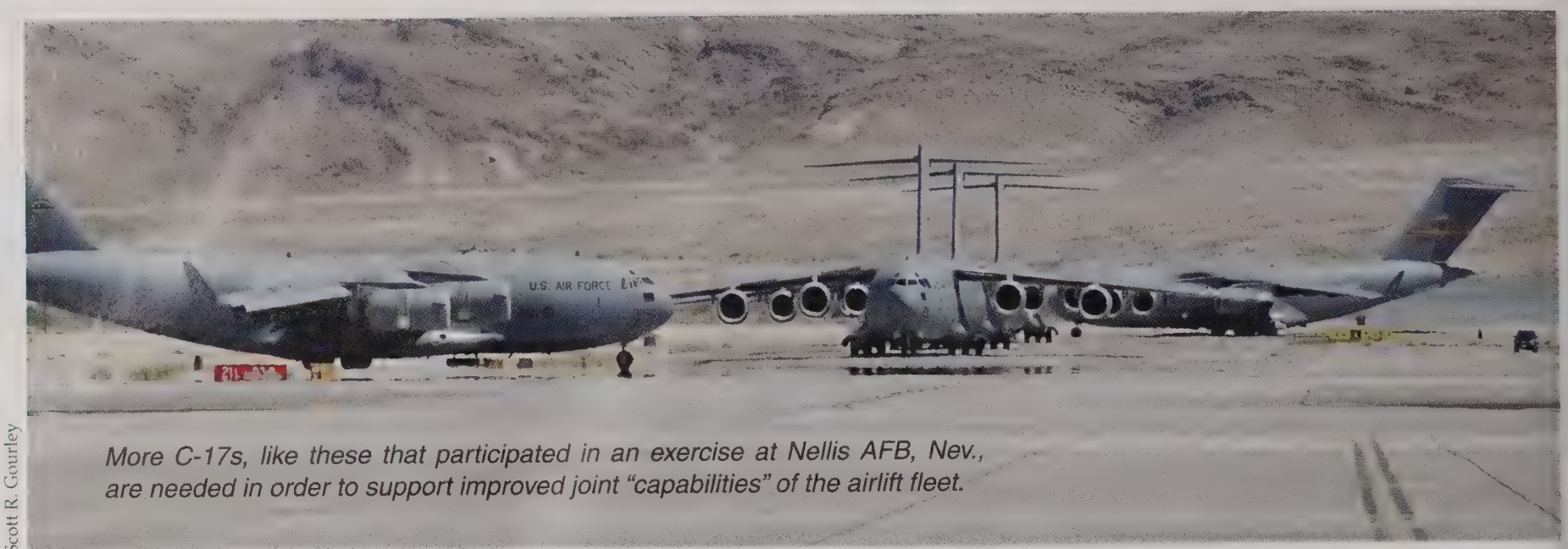
The Army and Joint Forcible Entry

By GEN Carl Stiner
U.S. Army retired
and
LTG Daniel R. Schroeder
U.S. Army retired

The August article "'Stacking Iron'—MAFEX Prepares Air Assets For Army Forcible Entry Operations" was of great interest. Earlier in this decade, Joint Forces Command was developing a joint integrating concept (JIC) entitled joint forcible entry operations (JFEO). Unfortunately, that JIC did not survive the Joint Requirements Oversight Council review, and work was terminated in 2005. This has led to inconsistencies and lack of jointness in today's thinking about joint forcible entry operations, which is particularly germane to the transformed Army responding to contingencies in the future.

Doctrinal language about forcible entry is found in Joint Publications 3-17, 3-18 and 3-31, and the Army Field Manuals 3-0 and 3-92. In Quadrennial Defense Review (QDR) documents, however, there has been no mention of forcible entry since the 2001 QDR. The 2002 edition of the Joint Strategic Capabilities Plan (JSCP) was the last mention of forcible entry as a required capability. There is no joint integrating concept on the subject. Thus we now find a divergence of approaches being taken unilaterally to what are probably the most complex and complicated joint operations, and no comprehensive statement of the requirement in Department of Defense documents. Worse, the approaches are ad hoc in that there is no forcing function such as mandated joint airborne air transportability training (JAAT) or joint amphibious/airborne training. The Global Response Force (GRF) executive order makes no mention of forcible entry capability, training or exercising. Joint Publication 3-18, *Joint Forcible Entry Operations*, cites three primary forcible entry operational capabilities: amphibious assault, airborne assault and air assault. These are not trivial evolutions, and they require formal statements of requirements in defense planning documents.

Army advocacy for its legitimate role in forcible entry operations is not apparent. Given the current operational tempo and end-strength constraints, some of that may be understandable. But with the advent of the Army force generation model and the Army's role in the GRF, it is time to assert that advocacy. What used to be called strategic brigade air drop was a joint capability specified in the JSCP that was jointly trained through the formal JAAT program. It was through that program and Department of Defense guidance that sufficient air drop-qualified aircrews were trained to provide the capability to conduct a brigade-sized drop from 500 feet at night, as would be required in a joint forcible entry. That capability has not been trained in at least seven years. Joint exercises such as Swift Strike, Solid Shield and Sand Eagle honed the edges on those early-entry joint forces. The most recent Mobility Air



More C-17s, like these that participated in an exercise at Nellis AFB, Nev., are needed in order to support improved joint "capabilities" of the airlift fleet.

Scott R. Gourley

Force Exercise and the 82nd Airborne Division's 2nd Brigade Combat Team (BCT) exercise to address its GRF role were ad hoc.

Military principals speak of global mobility for joint force projection and support and precision air-drop capability—the devil is in the details. Projection issues from 20 years ago persist today, such as secure en route communications for the airborne element of the joint force. The old C-130-type hatch-mount antennas still have to be used on the most modern airlifter we have, the C-17, and they take too long to install. Station-keeping equipment issues make the trail of aircraft so long that it precludes a BCT-sized air drop at night. A dual-row air-drop system from the C-17—a capability the Army asked for years ago—is still not demonstrated. Those three capabilities were conceived to allow the rapid build-up of combat power on the ground.

Then there is the issue of how many airlifters are required. The analyses to calculate that requirement have all been flawed with bad models, bad scenarios and old metrics. Consequently, the program of record is 205 C-17s and 111 C-5s (59 of which are C-5As with chronic readiness problems). This implies that 316 aircraft are sufficient—if this is so, the mix is wrong. This year's supplemental budget finally allows the Air Force to retire the C-5As. Those 59 aircraft should be replaced with modern, more reliable C-17s, which would allow the introduction of better capabilities to make the C-17 even more effective in support of joint force projection and special operations forces.

It is obvious that the C-17 will be the backbone of the airlift fleet for decades to come, and the current number is not nearly enough to ensure the nation's ability to respond to crises in a timely manner. The insufficiency in our airlift numbers is highlighted by the most recent deployment of the 5th Stryker Brigade Combat Team from Fort Lewis, Wash., to Afghanistan. Those Strykers being moved by ship will ultimately be lifted into Afghanistan by C-17s. But some of the unit's Strykers had to be transported by Ukrainian AN-124s. The United States is spending millions of dollars a year to lease these foreign aircraft, money that could be much better invested in buying more C-17s. The Air Force is notably silent on the issue.

Guidance, training, equipping and numbers issues are out there. To affect them, the Army should take an advocacy stand on joint forcible entry guidance, requirements and capabilities. The Army should advocate the inclusion of those elements into the defense planning documents currently being developed, for instance, the QDR and the JSCP. There should be a modification to the GRF operation order that requires a strategic BCT air-drop capability. In addition, the Army should advocate: reestablishment of the JAAT program; whatever it takes to provide inherent secure en route communications to the airborne element of a joint force; fixing the dual-row air-drop system of the C-17; fixing station-keeping equipment issues to permit BCT-sized air drops; retiring the C-5As and replacing them with an improved C-17; and integrating joint forcible entry operations into joint exercises, experiments, war games and analyses.

Operations Golden Pheasant, Urgent Fury, Just Cause, Desert Storm, Uphold Democracy, Enduring Freedom and Iraqi Freedom have served as evidence of the ongoing need to include joint forcible entry operations in our guidance, doctrine, training and planning. Their execution was—and is—due in no small part to the habitual relationships and practices developed during deliberate joint training under the defense planning guidance requiring those relationships. No one can anticipate where the nation may have to respond again, but a trained and demonstrated joint forcible entry capability is too important a matter of national security to ignore. □

***GEN Carl Stiner**, USA Ret., commanded the Joint Special Operations Command, the 82nd Airborne Division and the XVIII Airborne Corps, and was commander in chief, U.S. Special Operations Command. He was the commander of Joint Task Force South, which executed Operation Just Cause. **LTG Daniel R. Schroeder**, USA Ret., served as chief of staff, 24th Infantry Division; chief of staff, XVIII Airborne Corps; assistant deputy chief of staff, operations, Department of the Army; and deputy commander in chief, U.S. Army Europe. He commanded Joint Task Force Golden Pheasant and Joint Task Force Support Hope.*

BG Mildred C. Bailey, USA Ret., 1919–2009

BG Mildred C. Bailey, a former director of the Women's Army Corps (WAC) and the third woman in the U.S. military to attain the rank of general, died July 18 at the Knollwood military retirement residence in Washington, D.C. She was 90. While director of the WAC, from 1971–75, BG Bailey accomplished the task assigned to her by Army Chief of Staff GEN William C. Westmoreland: "to change the image of women in the Army."

During BG Bailey's tenure as WAC director, a period marked by the Vietnam War and social change in which women demanded equality and greater opportunity, the number of women in the Army increased from 13,000 to 39,000, the most since World War II. The all-volunteer Army allowed women to branch out from nursing and clerical roles. Women were allowed, for the first time, to command men; all-female units were abolished, and women became eligible for campus ROTC programs.

Mildred Inez Caroon was born in Fort Barnwell, N.C., in 1919. She graduated from the Women's College of the University of North Carolina, now the University of North Carolina at Greensboro, in 1940. A high school French teacher when World War II began, she joined the Women's Army Auxiliary Corps in the summer of 1942 at Fort Bragg, N.C., and was sent to Officer Training School at Fort Des Moines, Iowa. She was assigned to the Army Air Corps and stationed in Daytona Beach, Fla., where she met and married Marine Sgt Maj Roy C. Bailey. Because military rules forbade fraternization between officers and enlisted soldiers, the couple had to obtain special permission to marry.



BG Bailey taught English to French pilots until the end of the war and then worked as a vocational-guidance counselor officer for veterans. In 1949, she was transferred to Stuttgart, Germany, where she served as an intelligence officer, and in 1953 she returned to the United States to work in the intelligence branch of the Military District of Washington headquarters.

While in charge of the WAC detachment at Fort Myer, Va., BG Bailey worked on building a women's exhibit for a traveling set of displays that would inform the American public about the Army. From 1963–68, she traveled with the exhibition and expanded the women's history display. Among other assignments, she worked as a liaison officer for the U.S. Senate and in 1970 was made deputy commander of the training center at Fort McClellan, Ala.

BG Bailey opposed the decision to shut down the Women's Army Corps and integrate women into the Regular Army. (She is credited with designing the female drill sergeants hat.) She retired from the Army in July 1975, and the WAC was abolished as a separate unit in 1978. In later years, she helped raise funds for the Women in Military Service for America Memorial at Arlington National Cemetery.

BG Bailey, who maintained that women were as fit for combat duty as men, looked forward to a time "when gender, race and religion will have nothing to do with whether you have equal opportunity in life." She acknowledged facing sexual harassment during her 33 years in uniform and said: "You figured out a way to live with it, or you quit."

Her decorations included the Distinguished Service Medal, Legion of Merit, Meritorious Service Medal and Army Commendation Medal. BG Bailey's husband died in a traffic accident in 1966; she had no immediate survivors. □

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Fort Leonard Wood

Photographs and Text
By Dennis Steele
Senior Staff Writer

Using the latest technology, a soldier trains on a virtual combat convoy simulator (VCCS) at the U.S. Army Maneuver Support Center, Fort Leonard Wood, Mo. The VCCS trains an entire vehicle crew to react as a team to various threats, including improvised explosive devices (IEDs).

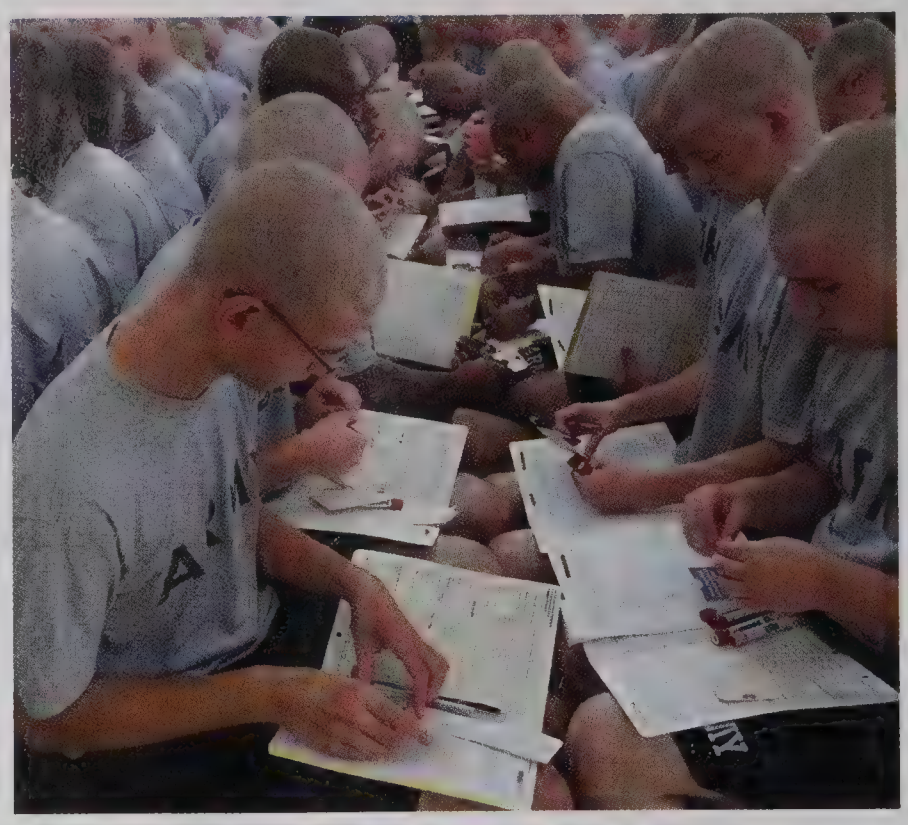
A portrait of a stern, khaki-clad MG Leonard Wood hangs outside the command group offices in the gleaming modern headquarters of the U.S. Army Maneuver Support Center (MANSCEN) on the Missouri fort that bears his name. MG Wood bridged the frontier Army

Worthy of Its Namesake

of the 19th century and the emerging world-power Army of the 20th century, pulling the force into the modern era with his determination and vision.

"As we are trying to develop our leaders for the 21st century, he is a great example," said MG Gregg F. Martin, the MANSCEN and Fort Leonard Wood commanding general.

"Leonard Wood was one of the great leaders of our country, a fascinating man," he continued. "He was a certified licensed surgeon his entire career, possessing a deep professional expertise in his function. Warrior spirit: He gets orders, goes out to the Arizona

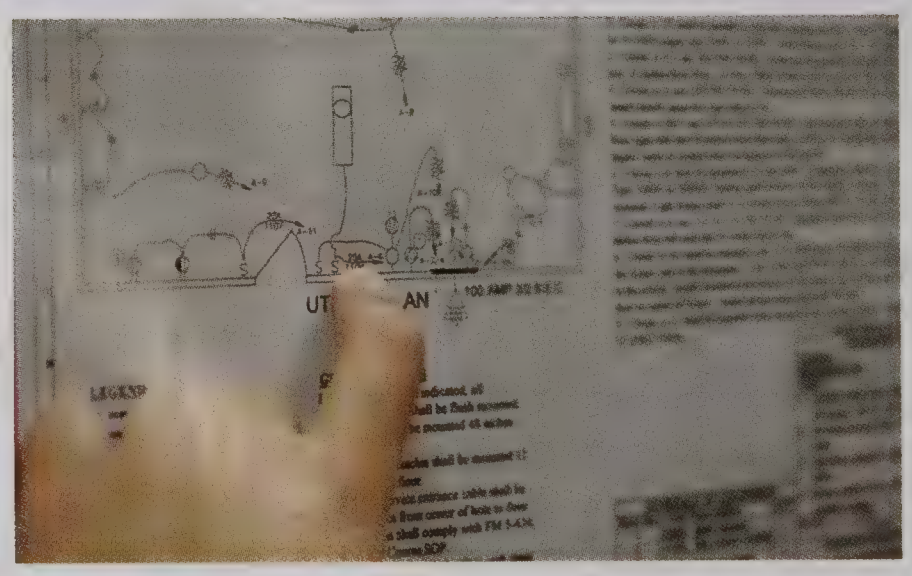


New arrivals begin the transition from enlistee to soldier, processing into the Army and basic combat training at Fort Leonard Wood.



Above, new soldiers get fitted for their boots at the fort's reception station.

Soldiers go through a graded practical exercise to become engineer electricians during advanced individual training at Fort Leonard Wood.



A soldier checks a circuit diagram during electrician training.

territory, gets into a cavalry outfit and is awarded the Medal of Honor. As a doctor in the base camp, he said, 'This is not good enough; I've got to get out into the fight.' He was a real warrior. During his career, he rotated between being a doctor and a cavalryman, and established the Rough Riders [along with] Teddy Roosevelt, who made them famous. But what you don't hear is that he became the military governor [of Santiago, Cuba] and worked on stability operations, infrastructure, education and health care. He became the Chief of Staff of the Army, transformed us from a constabulary frontier Army to the World War I Army and institutionalized the Reserve Officers' Training Corps. Here is a soldier who understood the role of good citizens and military education in a democracy, and ended up being the governor-general of the Philippines. He was an amazing guy."

In many ways, MG Wood's legacy embodies the spirit and direction of Fort Leonard Wood today—balancing the gritty work of preparing soldiers and leaders for combat with the intellectual pursuits of scholarly research and development.

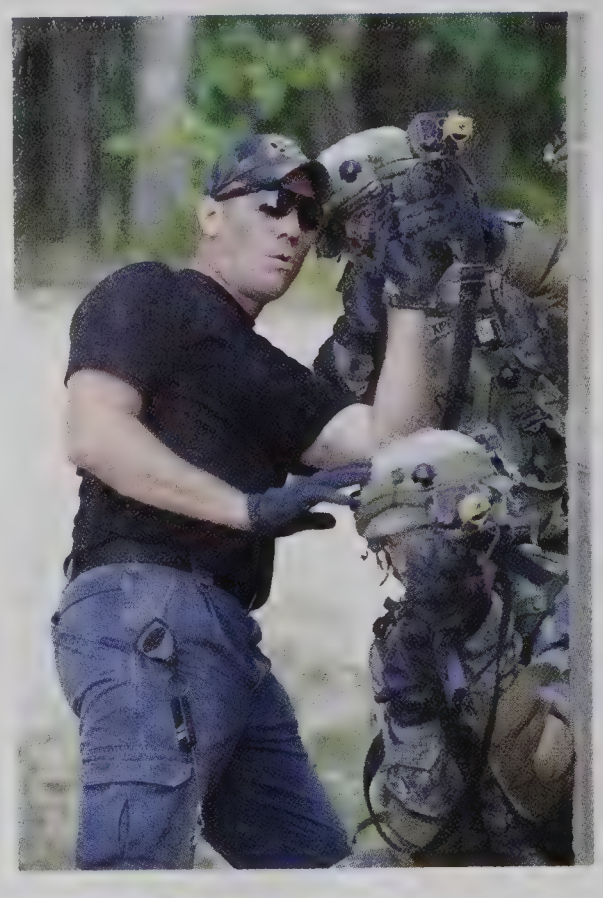
Over the past few decades, Fort Leonard Wood has

THE POWER TO BLIND THE ENEMY OR DISAPPEAR INTO THIN AIR WITH THE FLIP OF A SWITCH.



The new SureFire M952V LED WeaponLight gives you visible and IR capabilities in a single package without the need for filters or incandescent bulbs. Just rotate the self-locking bezel selector ring to go from blinding white light to 70mW of infrared output. The power is yours.

SUREFIRE



Mike Smith, a retired first sergeant, continues to train military police (MP) soldiers at a Fort Leonard Wood military operations in urban terrain (MOUT) site.

Below, a robot probes for IED or mine threats as its soldier operators go through the route reconnaissance clearance course at Fort Leonard Wood.





Above, Chemical branch officers train in a live nerve agent environment at the Chemical Defense Training Facility, one of the few live chemical and nerve agent training facilities in the world.



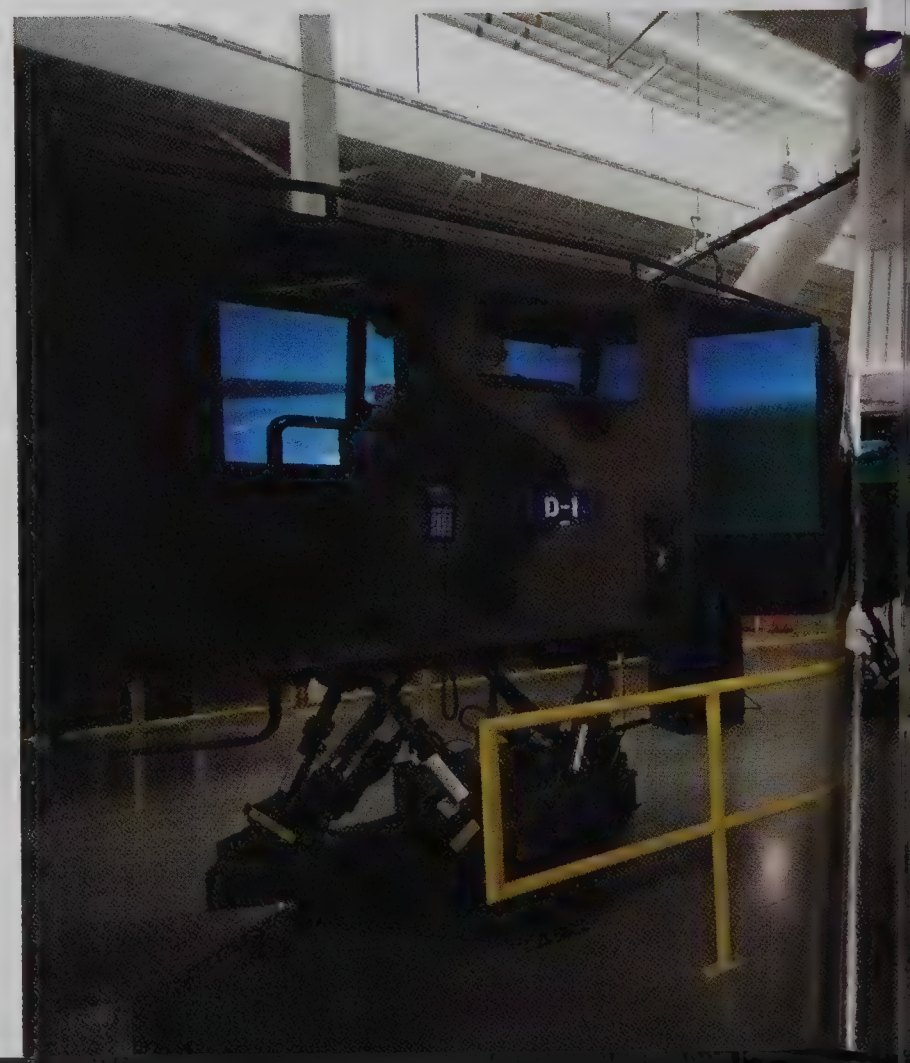
Right, during MOUT training, an MP soldier pulls his fire-team buddy into a building.

inched its way from a clapboard basic training post to a multifaceted base that is a model for joint and interagency cooperation. Progress has taken place largely under the radar, however; the fort has remained shackled to a jaundiced, outmoded and undeserved reputation of being a backwater franchise—the moniker *Fort Lost in the Woods* continues to plague its image, if not its efforts.

"I think we've had a bit of a bad rap," MG Martin said. "My message is that we're not lost in the woods anymore. We've been found."

The catalysts for modernization were the base realignment decisions of the 1980s and 1990s that brought the Army's military police (MP), chemical and engineer centers to Fort Leonard Wood. During the past decade, joint training activities with the Marine Corps, Navy and Air Force have been attracted to the fort, as have training activities from federal, state and local law-enforcement and first-responder agencies since 9/11.

"It is a very dynamic and diverse place," MG Martin explained. "There's an amazing array of activities and train-







Above and left, a soldier uses a joystick of a portable control station to control a robot during the route reconnaissance and clearance course (R2C2). R2C2 students employ robots to find and defeat IEDs.

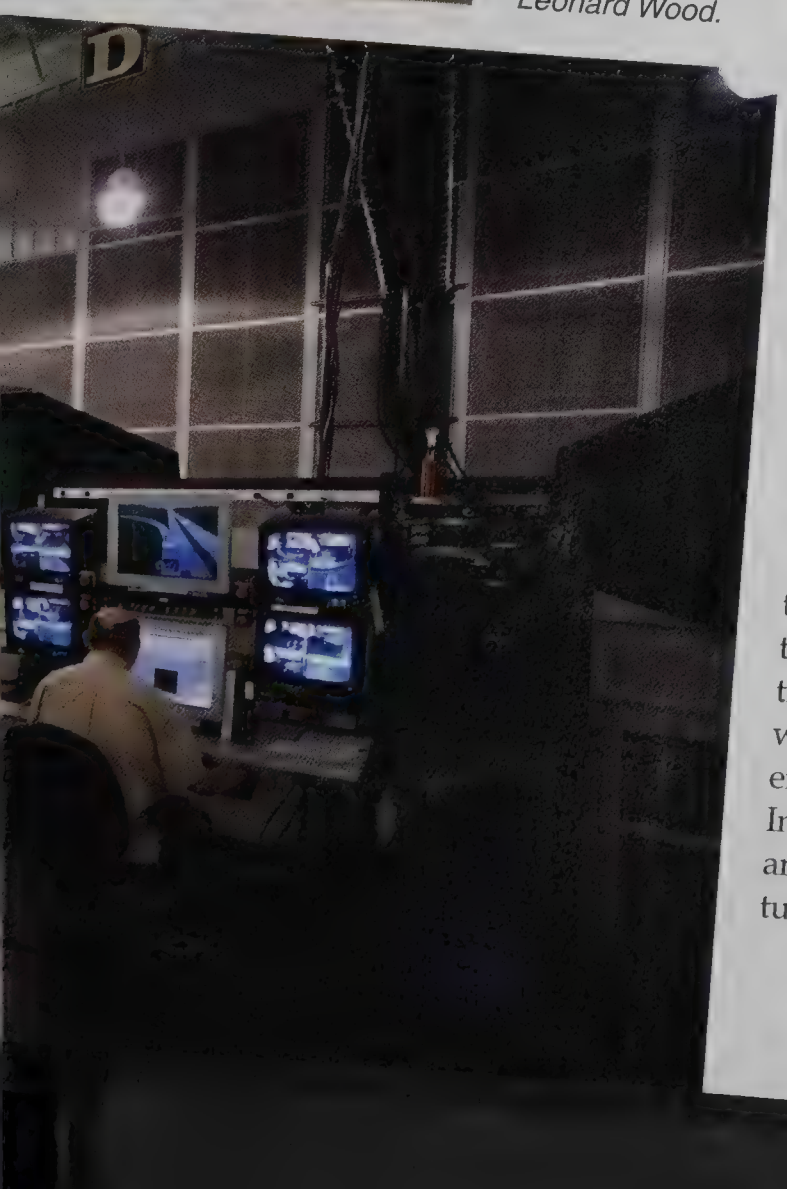
Below, advanced vehicle simulators stand in the Joint Tactical Vehicle Simulator Facility. All Army truck drivers—and truck drivers from all military services—are trained at Fort Leonard Wood.



A Husky metal detecting and marking vehicle leads a route-clearance patrol during R2C2 training.

Below, the forked probe arm of a mock Buffalo vehicle trainer unearths a mine during R2C2 training.



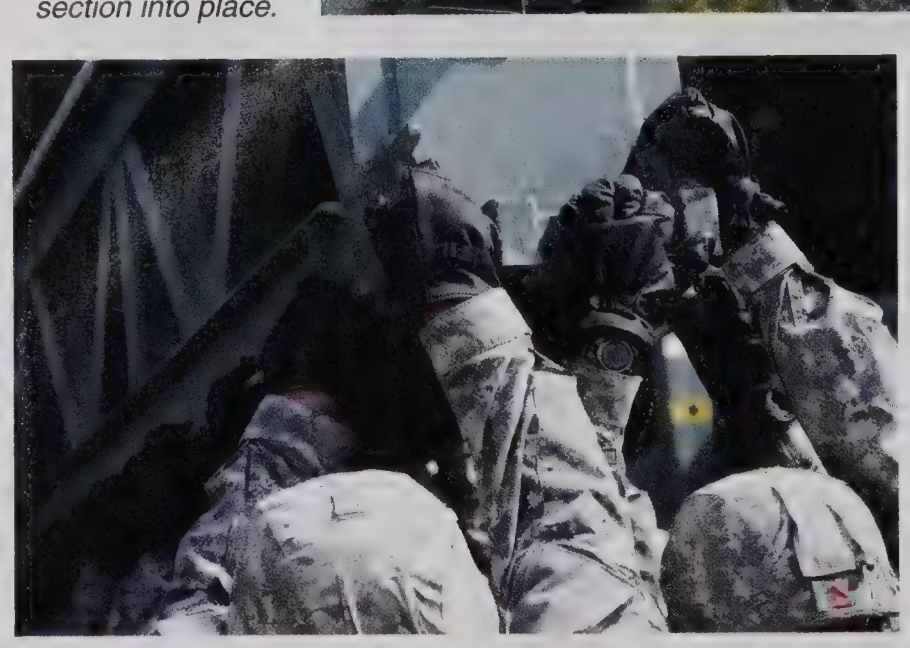


ing, and different organizations and specialties. Here, there is everything from basic combat training to one-station unit training to Army Individual Training; the biggest NCO academy in the Army; the warrant officer courses; and all the officer courses and leader development from Military Police, Engineers and CBRN [chemical, biological, radiological and nuclear]. We train from private all the way up to colonel with all the pre-command courses as well as all the cutting-edge functional courses that are having a direct effect on what's going on downrange and in the fight right now.

"There is a huge joint presence here, the largest Marine detachment off a Marine base in the world, and the same with the Air Force and Navy," he added. "The combination of all these different levels, echelons, services and branches—as well as the FORSCOM [U.S. Army Forces Command] presence—create an environment that is extremely dynamic. … In addition to being a physical engine of educating, training and developing leaders and warriors, we're also an intellectual engine, developing doctrine and concepts, organization,



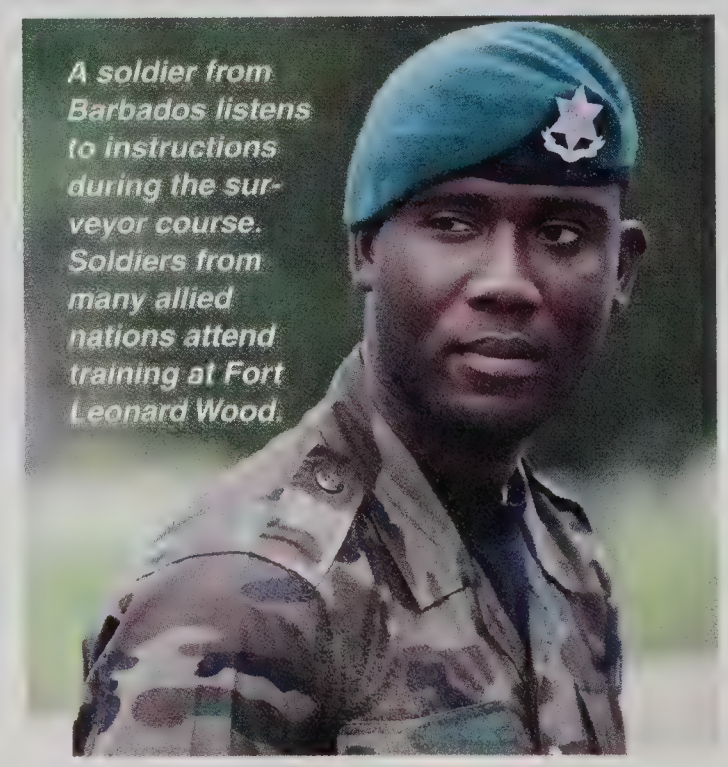
Right, soldiers training as engineer bridge crewmembers at Fort Leonard Wood lift a bridge section. Below, bridge crewmember trainees heave a section into place.



Right, a soldier attending basic combat training climbs a cargo net ladder.

Below, Air Force, Army and Navy students work with advanced global positioning system equipment while training as surveyors.





A soldier from Barbados listens to instructions during the surveyor course. Soldiers from many allied nations attend training at Fort Leonard Wood.





An Army diver goes through his first phase of training at Fort Leonard Wood.

new materiel, and science."

Proponency for the Engineer, MP and Chemical branches resides at Fort Leonard Wood, as does proponency for defeating improvised explosive devices, countering weapons of mass destruction and developing nonlethal technologies.

In recent years, the fort has become home to advanced technology development, harnessing cooperative efforts by the military,

On Point for Homeland Security

Fort Leonard Wood's 4th Maneuver Enhancement Brigade (MEB) has assumed responsibility as the consequence management reaction force to support the homeland-security mission under the Defense Department's joint task force-civil support. In an emergency, the 4th MEB's primary responsibility is to assist the federal, state and local response to a chemical, biological, radiological, nuclear or high-yield explosive (CBRNE) attack on the United States as the CBRNE consequence management response force under U.S. Northern Command. It will also be the operations element on call to respond if Defense Department assistance is required for a natural disaster. The 4th MEB is the U.S. Army Forces Command element based at Fort Leonard Wood.

The brigade commander, COL Rob Risberg, explained that the unit's headquarters will serve as the joint task force's operations task force to assess, plan and coordinate DoD assistance at the site of an emergency, initially having the assets of a first-responding aviation brigade task force and medical brigade task force, and a specialized military search-and-rescue task force.

In part, the mission statement is to save lives, mitigate human suffering and facilitate recovery. It calls upon the 4th MEB to work alongside and assist Federal Emergency Management Agency efforts and to work strictly under the guidance of state and local authorities.

In addition, the 4th MEB's 94th Engineer Battalion is currently an alert unit on-call for DoD response to a weather emergency such as a hurricane, flood or tornado.

"You don't see much about it in the media, but DoD is putting a lot of effort into supporting people at home in addition to the warfight," COL Risberg said. "It's a mission that no one wants to execute, but it's an important mission because it's a mission to come to the aid of our fellow Americans."

A Unique Collaboration

Fort Leonard Wood has established itself as a high-tech research and development center for the Army by forging a cooperative relationship among academia, private industry, regional economic interests and the military. It is home to the Leonard Wood Institute and its companion institution, the University of Missouri Technology Park.

The Leonard Wood Institute is a congressionally established nonprofit dedicated to building collaboration by funding research to meet the Army's identified technology needs, resulting in a stronger overall technology base and a boost for the local, state and regional economies. It receives direct funding from Congress through a cooperative agreement with the Army Research Laboratory—the only such enterprise in the Army. (The Navy has a similar project.)



The institute focuses on needs and opportunities at Fort Leonard Wood and the U.S. Army Maneuver Support Center. Results, however, could yield much broader application.

Project funding is allocated through three programs:

- Collaborative research and development (R&D), competitively awarded and currently funding 50 projects (26 by universities and 24 by private business) totaling $30 million.
- Special projects R&D, aimed at meeting unanticipated Army requirements and currently funding five projects totaling $1.5 million.
- Early-stage business R&D, aimed specifically at assisting small Missouri-based companies with high potential, funding 10 projects totaling $600,000.

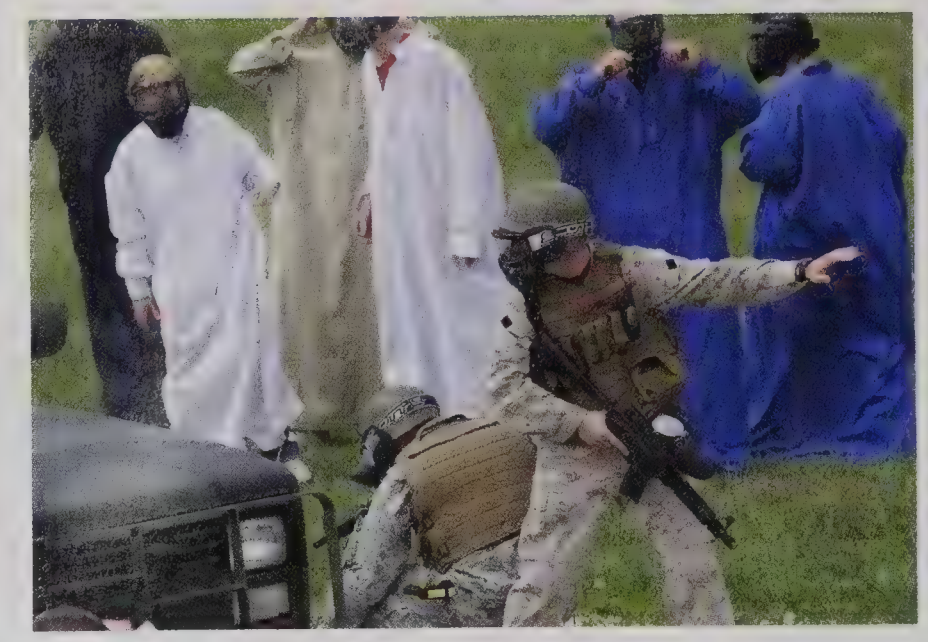
A number of other projects will be funded later in this fiscal year.

Adjacent to the Leonard Wood Institute is the University of Missouri Technology Park, which has a long-term lease for 60 acres (expandable to 250 acres) on Fort Leonard Wood and is designed to attract and facilitate industry partners to establish R&D activities at the park.

The Fort Leonard Wood Institute and University of Missouri Technology Park collaboration is designed to benefit all parties. The Army gains by having a streamlined conduit for developing technologies that soldiers need, businesses with good ideas get the opportunity to develop and introduce products, and the region gains jobs and increases its economic base.

A soldier and marine train together during the interservice nonlethal individual weapons instructor course (INIWIC) conducted by the fort's Marine Corps Detachment.

Below, a soldier armed with a simulated tear-gas spray can warns role-players during an INIWIC exercise.





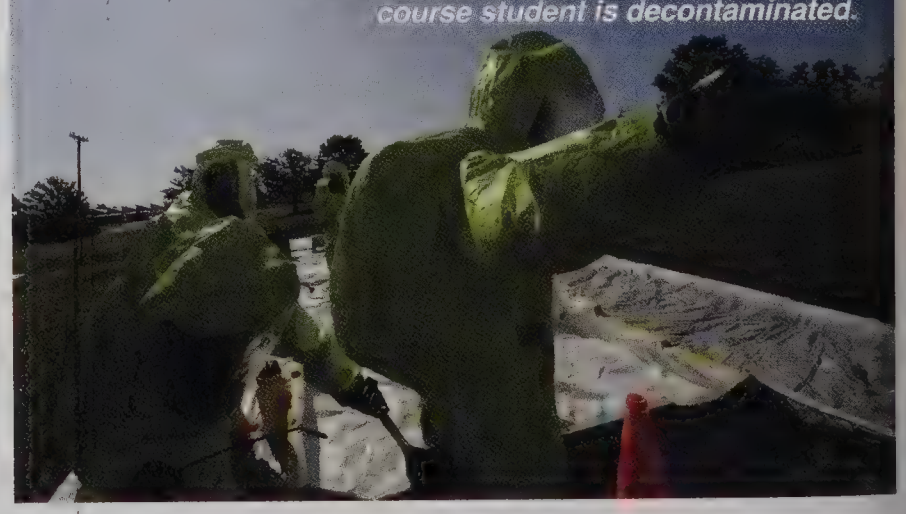
Right, drill sergeants from the 787th Military Police Battalion oversee combatives training during MP basic combat training.







Above, soldiers conduct a training exercise at the 1LT Joseph Terry Chemical, Biological, Radiological, Nuclear (CBRN) Responder Training Facility at Fort Leonard Wood. Here, a CBRN responder-course student is decontaminated.



Engineer equipment operators train at Fort Leonard Wood.

Right, an engineer in training.



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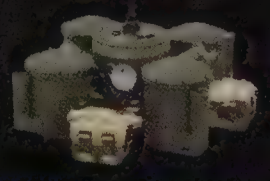
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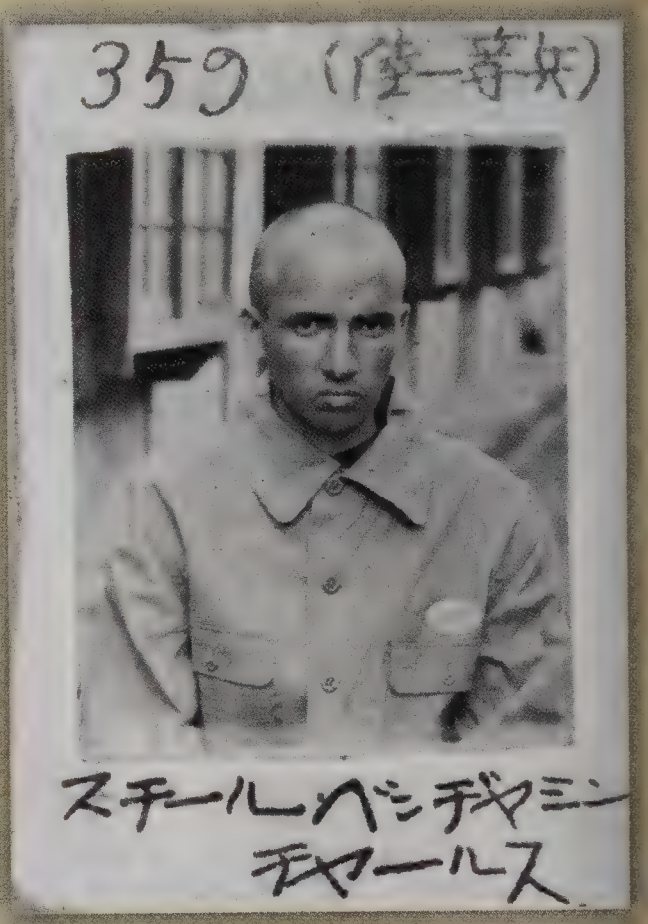
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Sketches from Bataan and Beyond

In the summer of 1940, 22-year-old Ben Steele was working the sheep camps outside of his hometown of Billings, Mont. As a jack-of-all-trades, Steele was living the life he loved on the Montana plains he loved, riding horses and free of even the most modest encumbrances of city life. Eighteen months later, Steele was one of 76,000 American and Filipino soldiers who surrendered to the Japanese Imperial Army at the tip of the Bataan Peninsula of the Philippine Islands. The surrender of American forces at the hands of the Japanese was "the single largest defeat in American military history." What followed was the infamous Bataan Death March. If one survived the brutality of the Japanese along the 66-mile trek north to the town of San Fernando, imprisonment, slave labor and, quite likely, death awaited.

Over the course of 1,244 days, thousands were murdered or died of malnutrition and disease. Ben Steele was not one of them. During his 41 months in captivity, Steele lost 50 pounds and suffered malaria, dysentery, beriberi and jaundice, to say nothing of the repeated beatings and torture at the hands of his captors. At one point during his imprisonment, a Roman Catholic priest administered the sacrament of last rites to a dying Steele. But Steele drew on the strength he had gained from his outdoors life back home in Montana. He told himself, "The type of life I've lived, dealing with the elements, I think that's going to help me take care of myself here." Beyond that, Steele relied on his fascination with the "magic" of drawing, which served as "a way to put all this other misery aside."

As other soldiers noticed Steele's unique talent—indeed, his passion—for sketching, "some of the officers approached him with a secret project. The cruelty they'd all suffered was criminal, they said, and no one was 'taking any photographs of this stuff,' so maybe he should





Courtesy of Ben Steele

By the fall of 1944, Ben Steele was a prisoner at the Ominemachi coal mine prison work camp. Steele returned home to Montana in 1945, in time for Thanksgiving.



start drawing it, create a record of atrocities for the reckoning that was sure to follow the war."

All of Steele's original sketches, hidden by a priest inside a Mass kit, were lost at sea. But upon return to the United States, he pursued a degree in art and eventually taught art at Montana State University, where, following retirement, he is presently professor emeritus. Over time, Steele has sketched and painted from memory many of the scenes he witnessed more than 60 years ago.

The sketches and drawings that follow (reprinted here with the artist's permission) are but a sampling of Ben Steele's lifetime accomplishments. Steele, age 91, lives with his wife in Billings and continues to draw and paint. Most recently, he was subject of a book, *Tears in the Darkness: The Story of the Bataan Death March and Its Aftermath,* by Michael Norman and Elizabeth M. Norman (see page 80) from which the quotations above, and those that serve as captions for the following images, are taken.



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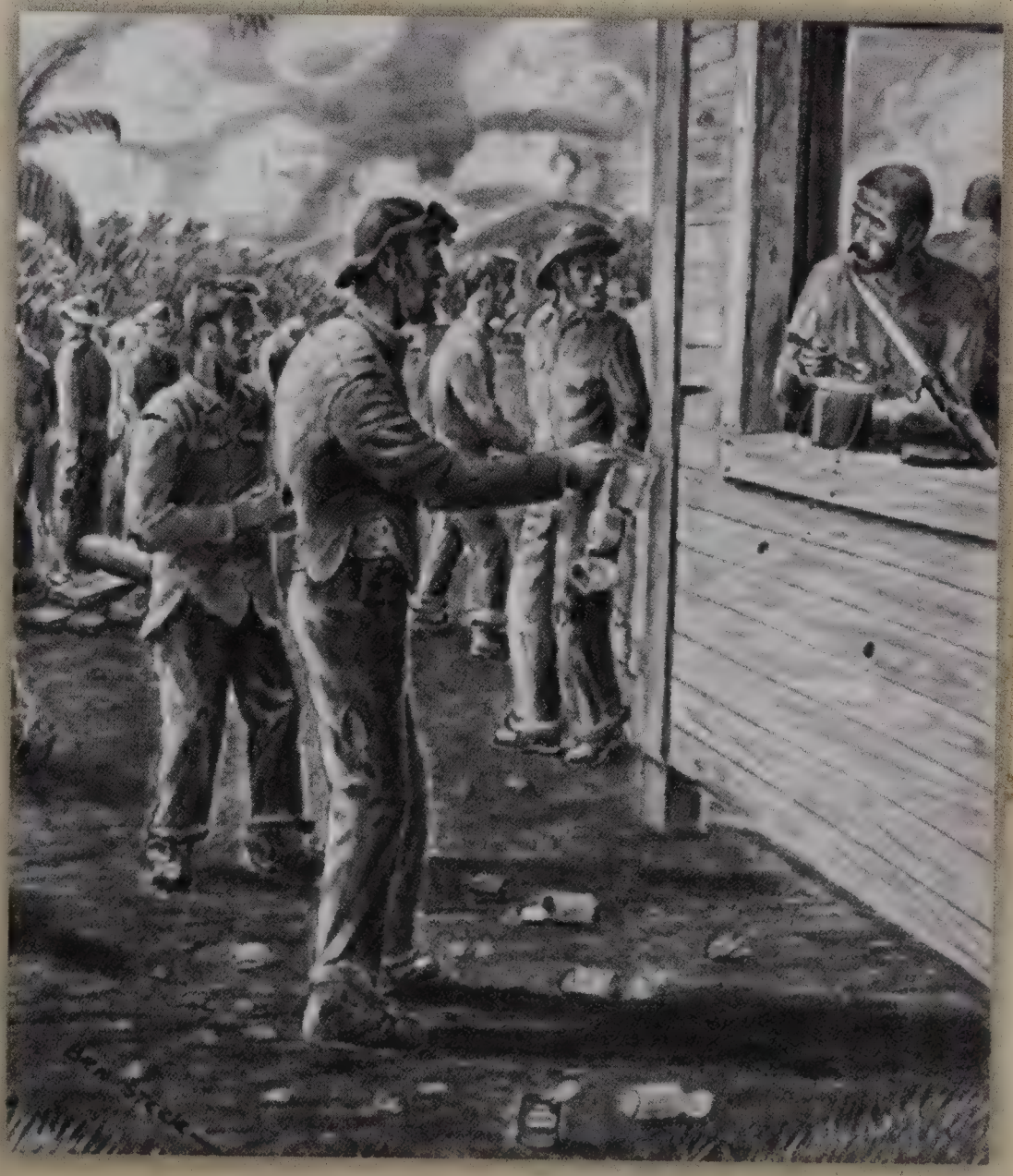
"They dropped so damn many bombs the sides of the trenches were caving in. … Then the fighters came in, just coming in right out of the smoke. Hell, I was shooting at them with my forty-five. Really, right at point-blank range."





"If war's gonna come, I wanna be in it. Hell, I want to be over there where it's happening," was Ben Steele's sense of the war that awaited him. Within 18 months of his enlistment, however, his take was decidedly different: "Only two things can happen to us now, we're going to be dead or we're going to be prisoners of war."

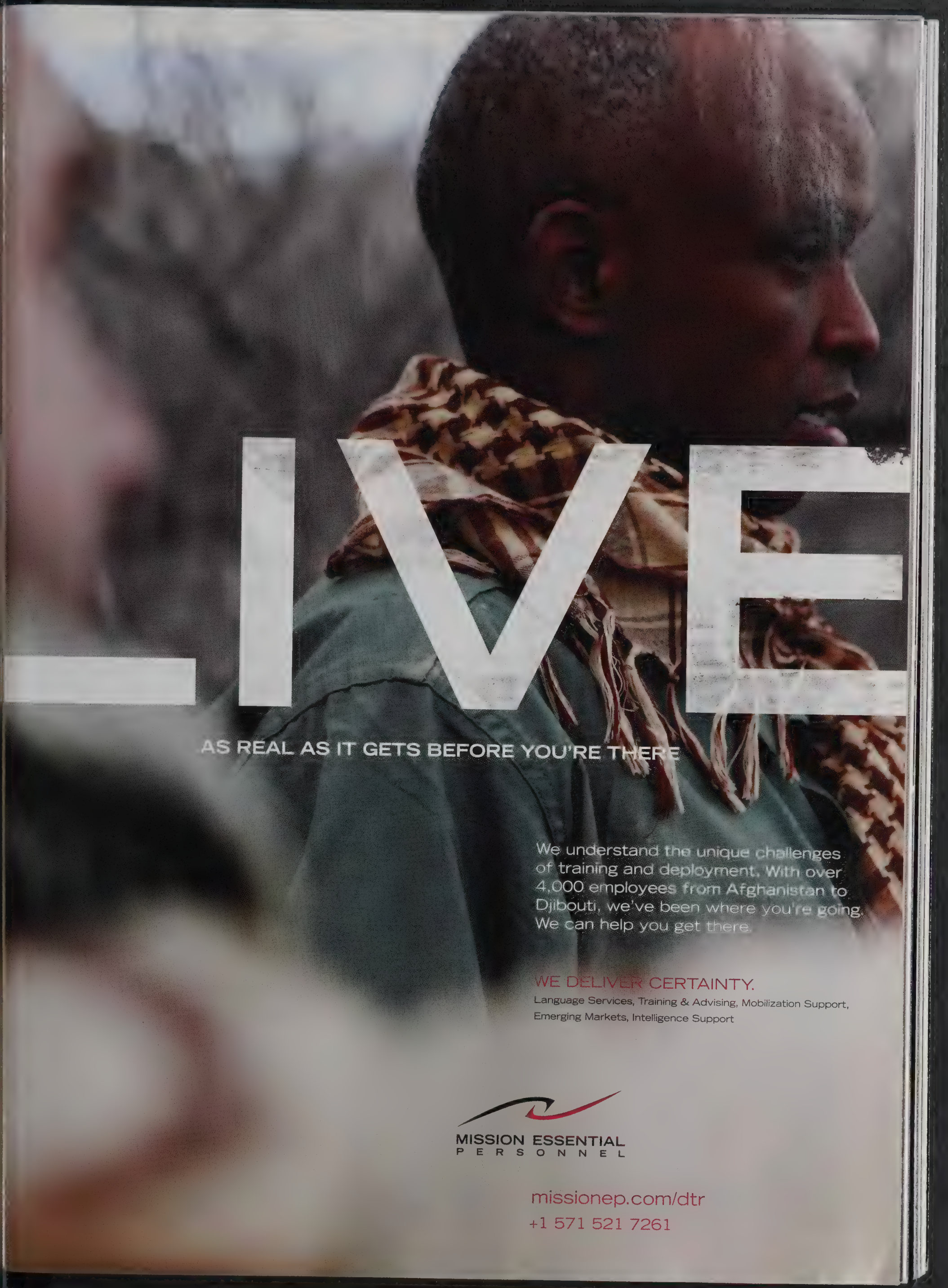






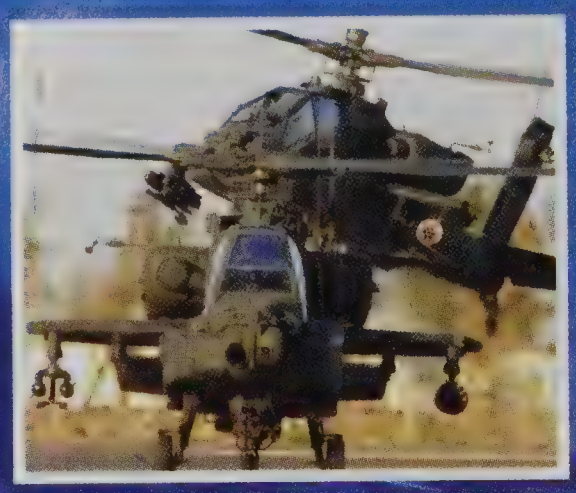
"I'm going to hang in there as long as I can," Steele told himself. "If there's going to be anybody left alive from this, I'm going to be one of them." Upon his return to the States, he told his mother: "[Y]ou just wouldn't believe where I've been. And I can't even explain that."




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PORTRAIT OF A POW



The August 24, 1942 issue of *LIFE* magazine published a Japanese photograph of American soldiers taken captive at the surrender of the Bataan Peninsula, the U.S. Army's largest surrender. They would soon set off on the 60-mile Bataan Death March. The sight galvanized our country's resolve after the Japanese invasion. A giant version of that picture hung in President Franklin D. Roosevelt's library in Hyde Park, N.Y. In 1944, while visiting

By Paul J. Greenhalgh Jr.



The March of Death: Prisoners with hands tied, left to right, PFC Sam Steuzler, 31st Infantry (died May 26, 1942, Camp O'Donnell); PFC Frank Spear, 31st Infantry (died July 18, 1943, Fukuoko, Japan); CPT James Gallagher, 31st Infantry (died April 9, 1942, Bataan).

Hyde Park, my mother gasped when she recognized Jim Gallagher's humiliated face. Jim's sister Katherine was my mother's closest friend. Sixty-seven years after the picture appeared, the soldier's sacrifice brings back the horror of that moment.

In the photo, Jim Gallagher stares into the eyes of his captor. He cries, hands tied, stripped of his soldier's dignity. He will die minutes later of dysentery and malaria.

All around him, prisoners are degraded, whipped and murdered; they will endure seven days of agony. They will wander, deprived of food and water. Relentless savage attacks taught our soldiers never to make eye contact with their captors, show displeasure or protest. Humbly, they endured taunts and degradation. Falling down—no longer able to continue—would result in instant death. Captives were shot, crucified or bayoneted while the Japanese taunted, howled and boasted. In the photo, Jim's mind seems to have progressed beyond survival mode. The preceding four months of fighting and starving have led to his surrender.

At the age of 27, Jim arrived in the Philippines one month before the bombing of Pearl Harbor. His family believed he would be safe, thinking that surely our war was with Germany. The Bataan Peninsula resembled a trigger finger jutting between the Manila Bay and the South China Sea. Our malnourished, courageous soldiers were trapped in a hopeless cause. Of the approximately 80,000 troops who defended Bataan, only 27,000 were "combat effective."

Embattled Americans chanted, "Oh, we're the Battling Bastards of Bataan, no papa, no mama, no Uncle Sam ... and nobody gives a damn."

American and Filipino soldiers fought jungle warfare before running out of ammunition, food and medical supplies. Reinforcements had been constantly promised; none arrived. President Roosevelt focused on the Germans, but in truth, landing reinforcements or supplies was impossible. Our fleet had been devastated at Pearl Harbor, a fact that was classified Top Secret.

On April 9, 1942, MG Edward P. King surrendered his emaciated defenders to Gen. Masaharu Homma through his subordinate, Col. Motoo Nakayama. Asked if prisoners would be treated humanely, Col. Nakayama sneered, "We are not barbarians."

Japan had never signed the Geneva Conventions. The Empire's code of conduct, called *Bushido*, declared surrender cowardice. Japan's savage treatment of American prisoners resulted in the death of more than 50 percent of Bataan's captured defenders. By comparison, German POWs perished at the rate of 1 percent over the same period. After surrender, 11,700 American and 67,000 Filipino prisoners embarked on the 66-mile march to Camp O'Donnell. The Premier of Japan, Hideki Tojo, branded Americans "capital criminals sentenced to hard labor."

For years, Jim was listed as missing in action. Prior to his call-up to active duty, he had been a sportswriter for the *Philadelphia Record*. On March 19, 1942, the paper's publisher printed a chillingly prophetic tribute:

> On December 20, Postmaster Gallagher [Jim's father, Joseph] was assured by the War Department that Jim was safe. Last

---

***Paul J. Greenhalgh Jr.**, a former U.S. Army Reservist, worked in the medical technology field for more than 40 years. He is the author of* In Search of Corky.



week he was told that Jim's name had not come through on any casualty list.

The men he worked with on the *Record* knew he could take it. His boss, Bill Driscoll, sports editor, said yesterday that Jim had more courage than any kid he ever knew. He was a lightweight in size, but he'd tackle any assignment that came his way.

It was Jim who did the "Dinny the Dab" series, humorous yarns in which Dinny, a novice, tried his hand in person at every sport from fencing to wrestling. Dinny almost had an arm broken on the mat. He risked his neck pole-vaulting. He actually begged a boxer to really do his stuff so he'd know how it felt to take the count.

Jim learned a lot in those rough-and-tumble days. But, in looking through the old clips, we can't find a sport where he ever learned to surrender.

Weeks later Jim was forced into the unthinkable. Then he disappeared.

On September 25, 1942, Baseball Hall of Fame columnist Walter (Red) Smith remembered his comrade:

> I don't know how to say what's in my mind today, and I'm not sure I ought to try. A dozen times in the last nine months, people who knew we were friends have asked, "Why don't you write a piece about Jim Gallagher?" And I have replied, "I can't. Not while we don't know about him."
>
> None of us who worked beside him can think of him without choking up. He hasn't been out of our thoughts for more than a few hours at a stretch since the first bomb fell on the Philippines and we knew he was there.

The *LIFE* picture showed that Jim was alive when the death march began. More than 10,000 captives died on the march. Many prisoners simply disappeared. The Japanese enforced strict secrecy. No trace of Jim was found. The war ended, and still no word.

On November 23, 1945, Jim was posthumously awarded the Silver Star for gallantry in action at Bataan. (The medal was officially presented to Joseph.) The Army presumed Jim dead, but the family continued to hope. After Joseph's death, his brothers Thomas (U.S. Marine Corps) and Joseph T. (U.S. Army) Gallagher remained faithful to the search.

Finally, in 1984, the picture led to closure for Jim's family. A surviving soldier (not shown in the picture) contacted the family to confirm that Jim died minutes after the picture. He said, "I tried to bury him as best I could by the side of the road."

A memorial was held that spring at Arlington National Cemetery. My brother, Father (Fr.) Donald Greenhalgh, was invited to lead the service. The Gallaghers were comforted that someone they knew eulogized Jim. Fr. Donald led a reverent procession to the beat of military drums. Jim's relatives proceeded to a section honoring soldiers without remains to pray over Jim's headstone. Forever cooled was Jim's raging fever.

* * *

Jim, we cherish your sacrifice. … Your stand on Bataan delayed the Japanese six weeks in their plan to attack Australia. Your service bought our forces time to mobilize.

You and I are links, though distant, in the same chain. We toil on the same pilgrimage. Each of us is essential during our window of time. Your contribution may have seemed, to you, useless. A grateful country blesses your life and honors your sacrifice. Our land is good. Japanese soldiers hated us solely because of who we were. Today Islamic fundamentalists hate us for the same reason. Just as your sacrifice had meaning, our hate-filled enemy continues to test our resolve. … Americans know your name, and your sacrifice will always be cherished. ★

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American War Memorials Overseas

Preserving America's Overseas Wartime Legacy

Photographs and Text
By MAJ Lillian Pfluke
U.S. Army retired

American war memorials in foreign countries tell fascinating stories. From tiny plaques honoring the death of a single soldier to elaborate edifices commemorating armies fighting their way through a region, these war memorials not only honor American soldiers abroad, but also serve as highly visible symbols of America's historic and continuing engagement overseas.

The spot where SGT Alvin C. York earned his Medal of Honor is marked with such a monument, as is the crossroads where then-2LT Audie Murphy earned his. The site of the Lost Battalion's final stand; the last bridge over the

The 1st Infantry Division monument overlooking Omaha Beach is one of 10 war memorials the Division beautifully maintains in Europe.



This decaying monument at Bourg, France, marks the grounds where then-LTC George S. Patton established the U.S. Army's first Armor school in 1918.

Rhine at Remagen, Germany; and the location of the U.S. Army's first Armor school in eastern France are some of the sites of the Army's wartime heritage marked by overseas war memorials. A replica of PVT John Steele and his parachute still hang from the church steeple at Sainte Mère Eglise, France, commemorating the town's liberation on the night of June 6, 1944. An enormous memorial and a museum in Bastogne, Belgium, mark the desperate fighting there during the bitter winter that followed.

The First Infantry Division has them. So does the Second Infantry Division, the Third, the Fourth and the Fifth—most U.S. Army divisions have war memorials honoring their accomplishments on foreign battlefields. In some cases, these memorials were built by the troops themselves with materials at hand when they were still in the area of operations. Sometimes the units took up payday collections to construct something more permanent or architecturally interesting. Often towns erected memorials in grateful appreciation of their liberators. Occasionally heartbroken family members wanted to remember their loved ones. More recently, veterans groups have raised money to erect memorials honoring their fallen comrades from years ago. As a result of all these nongovernmental initiatives, in addition to the official efforts of the U.S. government, there are more than 1,000 war memorials on foreign soil commemorating the wartime contributions of the U.S. Army.

In the vast majority of cases, however, the U.S. government has neither the resources nor the mission to care for these sites. The American Battle Monuments Commission maintains in splendid condition 24 overseas military cemeteries and 25 U.S.-constructed federal memorials. More than 1,000 other sites honoring Americans are considered "private" memorials, and thus are maintained entirely with private funding. While some monuments are beautifully maintained by U.S. associations or local towns, maintenance of many sites is haphazard and problematic.

After each of the World Wars, the next of kin of deceased soldiers was asked to choose what to do with the remains of their loved ones. They could repatriate the remains to the United States for private burial, or they could leave the remains in a U.S. Army cemetery overseas. Several hundred families chose a third option of burying their loved ones where they fell. Hundreds of other families, often recent immigrants to America, chose to repatriate the remains not to the United States, but to their homelands elsewhere in Europe. Thus while today we have just under 125,000 American war dead buried in overseas American military cemeteries maintained by the American Battle Monuments Commission, we also have hundreds of other sites worldwide of isolated graves of U.S. combat soldiers. While World War I Medal of Honor recipient SGT York is buried at home in Tennessee, the remains of fellow Medal of Honor recipient SGT James I. Mestrovitch rest in a churchyard in a small town in Montenegro, where he was born.

***MAJ Lillian Pfluke**, USA Ret., has extensive experience researching and preserving war memorials. A graduate of the U.S. Military Academy, she worked for the American Battle Monuments Commission in Paris for 10 years before founding American War Memorials Overseas.*



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SGT Alvin C. York is honored in front of the town hall in Chatel Chehery, France. SGT York earned his Medal of Honor in the woods nearby.

When the families chose to leave their loved ones in isolated burial sites, they accepted all responsibility for gravesite maintenance. By law, their decision was considered permanent, and they specifically absolved the U.S. government—and hence the American Battle Monuments Commission—of any maintenance obligation. While a few families remain very connected to these sites, in most cases the memory and the connection have been lost over the years.

While working for the American Battle Monuments Commission in Paris, I discovered thousands of memorials honoring Americans, sites that the U.S. government does not maintain. Because no organization recorded the existence of these sites, most Americans don't know about them and, in many cases, the sites are poorly maintained. In other countries with significant numbers of war memorials, nonprofit foundations exist to care for private war memorials. I decided to create such an organization for America's overseas war memorials.

American War Memorials Overseas (AWMO) is a nonprofit corporation that documents, promotes and preserves non-government-supported war memorials honoring Americans outside of the United States to ensure that these monuments remain part of local communities forever. AWMO's mission includes:



The Lost Battalion was encircled in this valley in Binarville, France.

■ Recording the existence and location of non-government-supported war memorials honoring Americans overseas and making this information available to the public.

■ Encouraging cultural tourism to visit these historical sites.

■ Encouraging and facilitating local communities to fly the American flag over private war memorials honoring Americans.

■ Monitoring the condition of these war memorials and encouraging their conservation.

■ Advising those involved in war memorial projects and facilitating maintenance projects for sponsoring organizations.

■ Working with communities and organizations to encourage local responsibility for war memorials and recognizing the need to conduct restoration work on these monuments as required.

■ Building a greater understanding of war memorial heritage and raising awareness of the issues surrounding war memorial conservation.

The American War Memorials Overseas web site, uswarmemorials.org, maintains a searchable database to

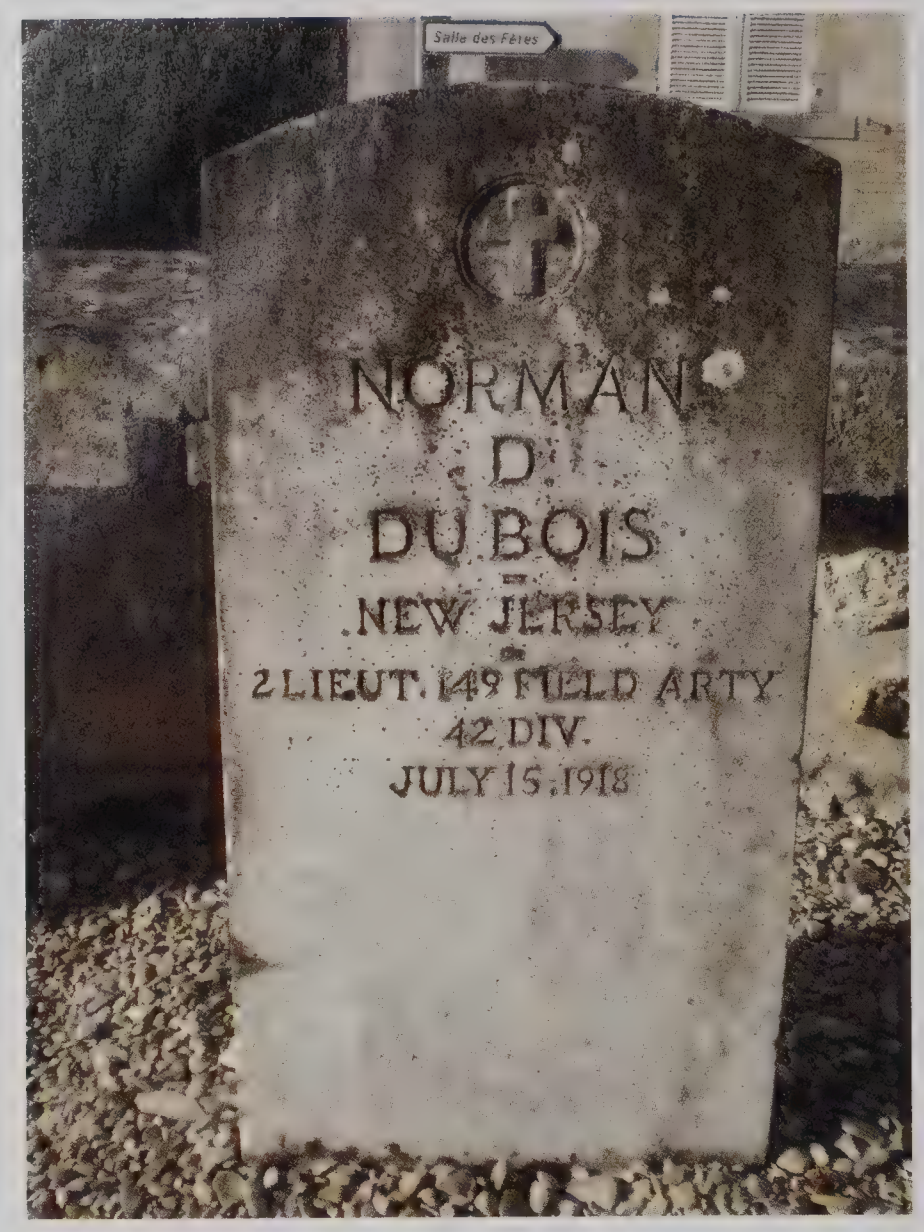
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Many isolated gravesites, such as this one in a churchyard in Cuperly, France, have been forgotten and are no longer maintained.

which memorials are continually added. Visitors can search for sites by location, unit, person or war. They can find pictures of the site, transcriptions of the exact text on the monument and even a link to a mapping service to precisely locate the site. There are resources to use in monument maintenance or in planning war memorial ceremonies. American War Memorials Overseas publishes an electronic quarterly newsletter that spotlights different memorials around the world.

AWMO relies on regional volunteers to monitor and report on the condition of war memorials as well as to work with others in their area to preserve war memorial sites. Regional volunteers generally live or travel extensively in an area overseas where U.S. forces fought. Valuable information about the existence of war memorials comes from a wide variety of sources, including traveling Americans, local researchers, historical publications and veterans organizations. AWMO gathers information from multiple sources to include the maximum amount of information about each site online.

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American War Memorials Overseas is currently fundraising to launch two major programs. The first is an effort to send donated American flags to villages with U.S. commemorative sites that are not supported by their respective foreign governments. Often towns are unable to obtain flags and, even if they can, are unaware of the proper protocol for flying the American flag. AWMO will distribute U.S. flags and local-language instructions on how to fly them properly with the goal of having the Stars and Stripes flying over hundreds of sites around the world. The second AWMO initiative is to give grants to local organizations to fund maintenance and refurbishment projects at U.S. commemorative sites that don't otherwise receive any financial support.

A war memorial is certainly a remembrance of the past, but it is also a beacon for the future. It is a reminder for all of us to constantly nourish our ties to other countries and other peoples. It is a way of keeping memories alive—not to dwell on sadness and death, but to think about heroism, sacrifice and freedom. American War Memorials Overseas is proud to assist in preserving America's overseas wartime heritage. ★



A parachute with an effigy of PVT John Steele hangs from the church steeple in Sainte Mère Eglise to commemorate the D-Day invasion and the town's liberation.

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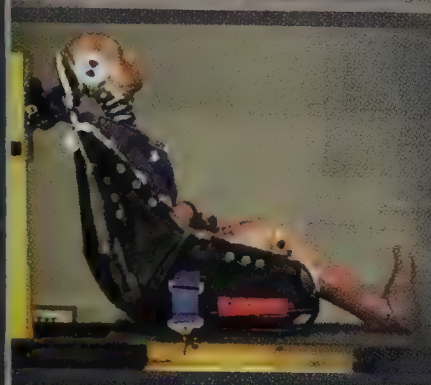
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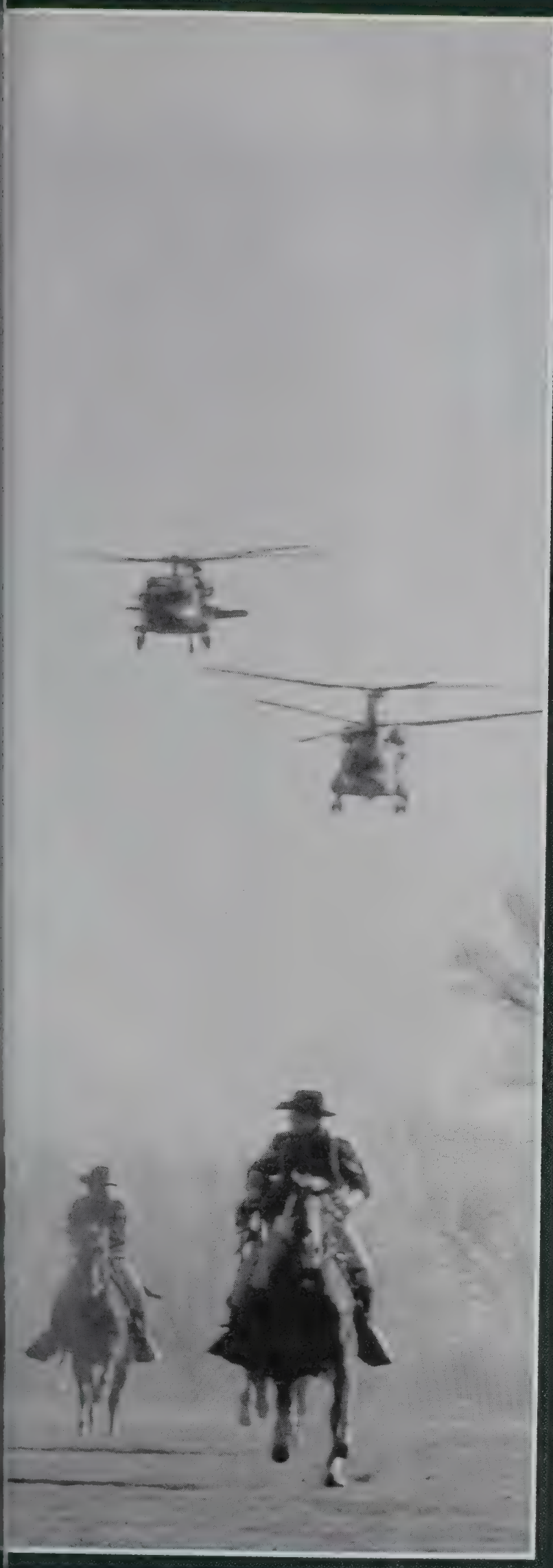
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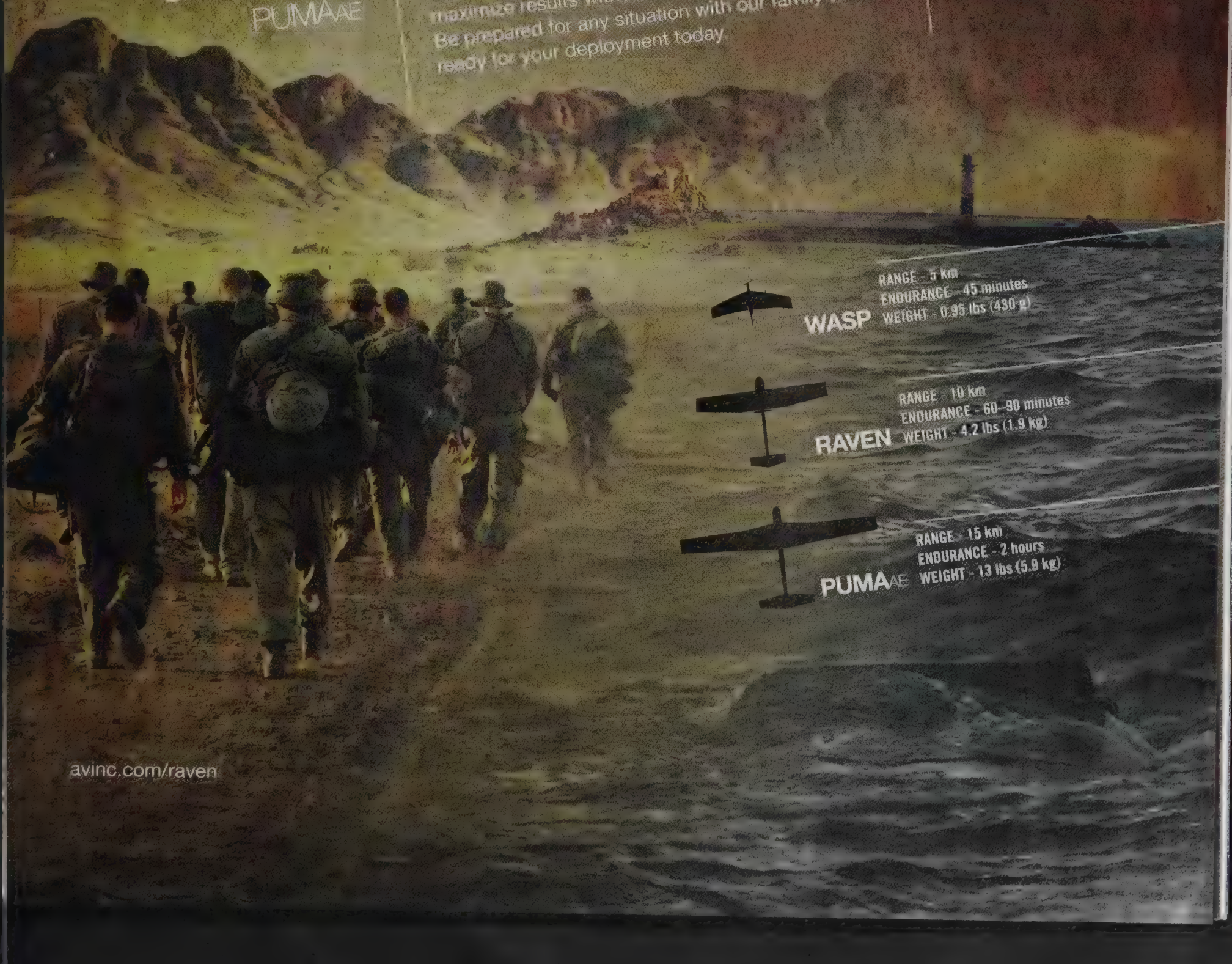
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HONORABLE MENTIONS



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HONORABLE MENTIONS



Michael N. Curtis

Best Sapper Competition, helocasting at Fort Leonard Wood



SPC Anna J. Singletary

SGT Christian A. Railsback maneuvers the obstacle course during the 513th Military Intelligence Brigade NCO/Soldier of the Year Competition

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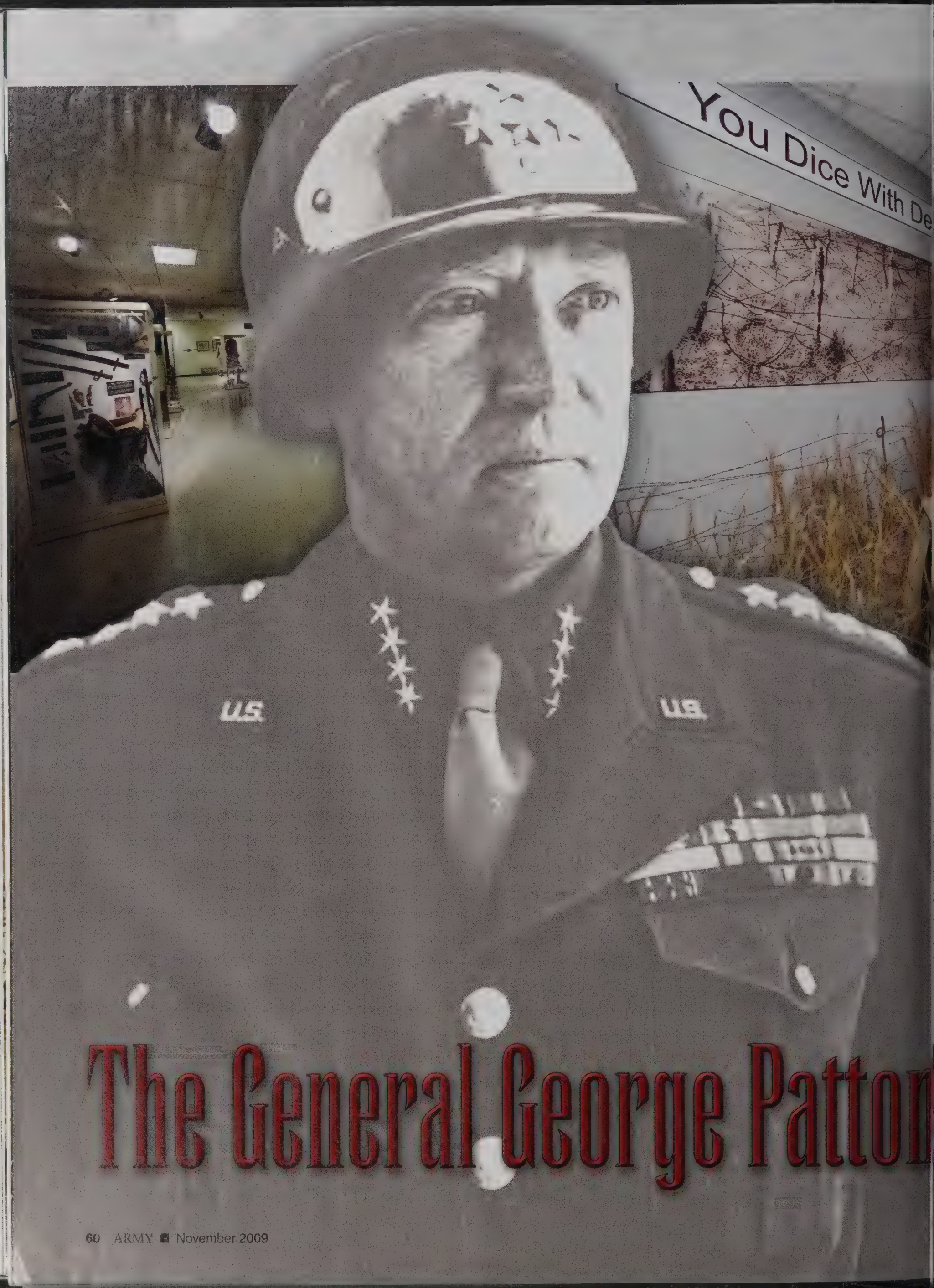


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The General George Patton





Originally dedicated in 1949, the General George Patton Museum is administered by the U.S. Army Armor Center, Fort Knox, Ky., to preserve historical material, enhance the training of Armor soldiers, and facilitate public education and research. One of the largest in the U.S. Army museum system, the Patton Museum boasts the most extensive collection of Patton artifacts in the world and serves as the focal point for historical training of all Armor soldiers at Fort Knox. Galleries devoted to GEN Patton, World War I, World War II and the post-world war era compose the museum complex along with a special exhibit area, the Emert L. Davis Memorial Library, outdoor displays and the Armor Memorial Park. Open year-round to the public, the museum hosts more than 125,000 visitors from around the world. Admission is free.

Museum

Photographs by Dennis Steele



The World War II Gallery at the General George Patton Museum at Fort Knox, Ky., boasts a wide array of tanks used by the U.S. Army and foreign armies.

Armored vehicles throughout the 20th century are on display, providing a visual history of armored warcraft.

The museum is the focal point of historical training for all Armor soldiers at Fort Knox.





Above, GEN Patton's World War II staff car.

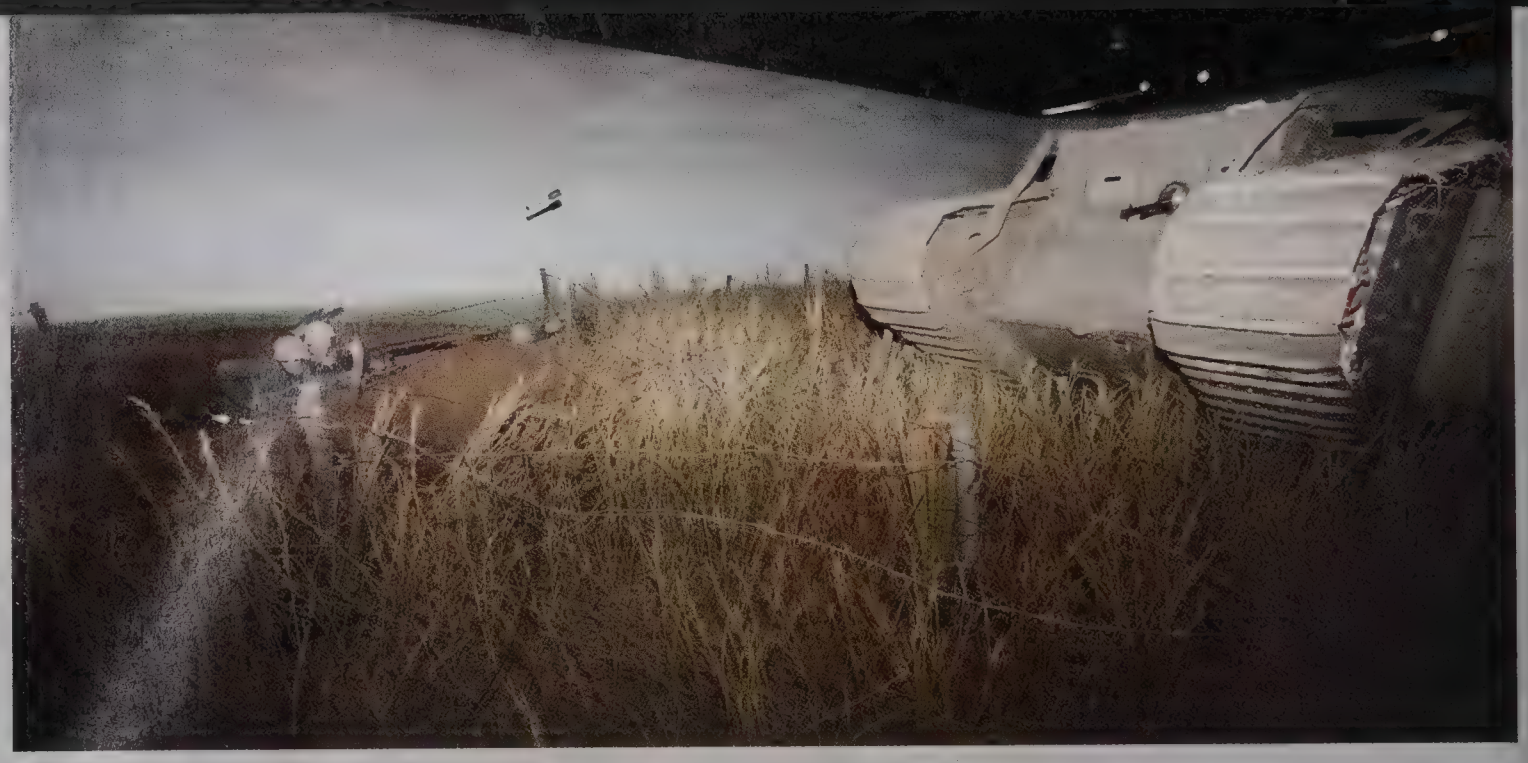


Left, GEN Patton's achievements with the Third Army confirmed his status as a war hero.

Below, the museum contains the largest collection of Patton artifacts in the world.



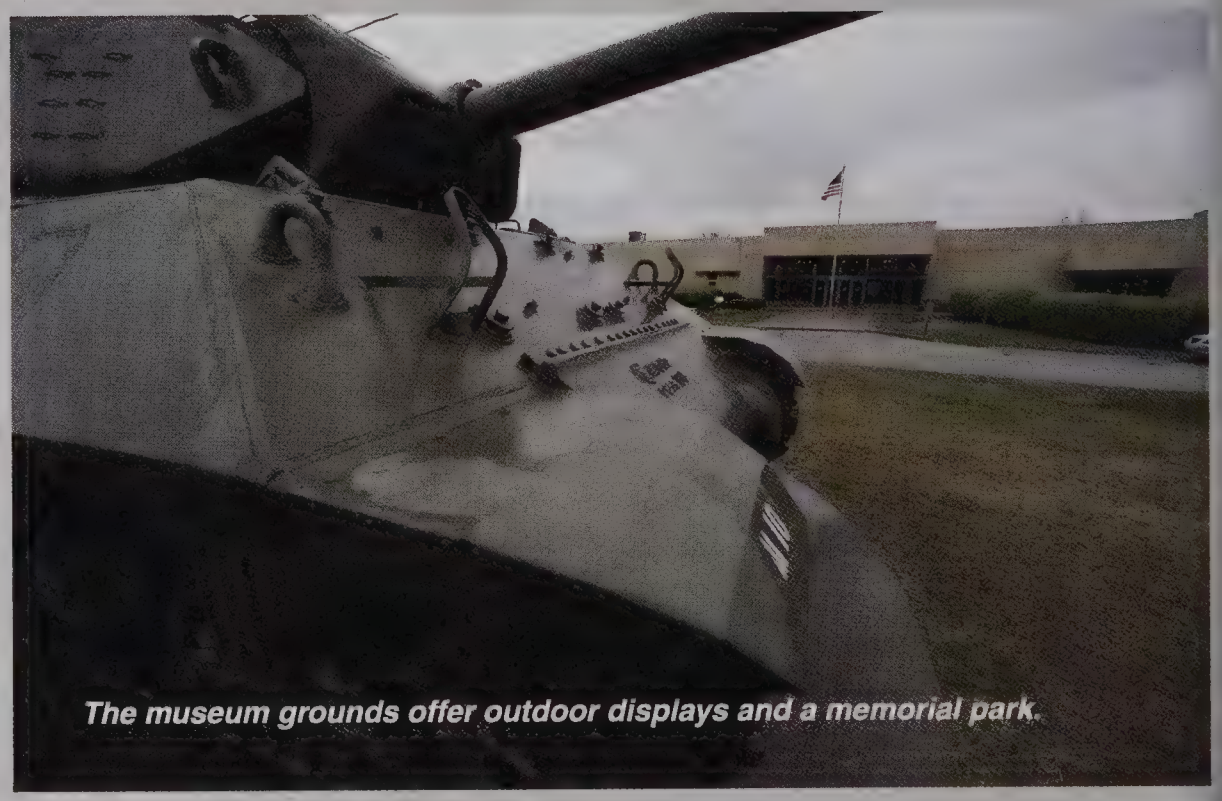




The British Mark V was used in World War I, marking the beginning of mechanized armor warfare.



Above, GEN Patton's bomber jacket and helmet are just some of the many personal effects displayed in the Patton Gallery.



The museum grounds offer outdoor displays and a memorial park.



In addition to discovering Patton's achievements, visitors can learn about warfare throughout U.S. history.

BCT Modernization Reaches Critical Milestone



Photographs by Scott Gourley

Army Evaluation Task Force commander COL Randy Lane deployed his brigade tactical operations center to support limited user testing (LUT) at White Sands Missile Range, N.M.

By Scott R. Gourley

U.S. Army brigade combat team (BCT) modernization achieved another critical milestone in late August, when soldiers from the 5th Brigade, 1st Armored Division (Army Evaluation Task Force [AETF]), began limited user testing (LUT) of the initial capabilities package at White Sands Missile Range, N.M.

"Until this year, Future Combat Systems (FCS) was really the cornerstone and the core of Army modernization," said Paul Mehney, a spokesman for the Army's evolved BCT modernization effort. "The chief difference between the LUT and the FCS efforts was one key thing:



SPC Joshua Whiteland, Company C, 2nd Combined Arms Battalion, maneuvers a small unmanned ground vehicle (SUGV) Block 1 during village operations.

FCS was dedicated to providing the full suite of military hardware—including vehicles, robots and sensor platforms—all connected by a network. And that was going to go to 15 brigade combat teams."

"The Army currently has 73 brigade combat teams," he continued. "Only 15 of those were originally going to get the full suite of FCS equipment, but the Army has taken a look at a lot of the lessons learned from Iraq and Afghanistan and realized that we need advanced intelligence, surveillance, reconnaissance (ISR) and lethality capabilities. We realize that we also need network capabilities to allow units all the way from squad to brigade levels to communicate across the battlefield."

Those capabilities provided the focus for the September LUT and are the critical element of the BCT modernization effort. As currently projected, this modernization package, followed by others of increased capabilities, will be applied to all 73 U.S. Army brigades between calendar years 2011 and 2025 (the initial capabilities package will be applied to the first seven Infantry BCTs between 2011 and 2014).

The initial LUT capabilities set included: the non-line-of-sight launch system (NLOS-LS), tactical unattended ground sensors (T-UGS), urban unattended ground sensors, Class 1 unmanned aerial vehicle (UAV) Block 0, small unmanned ground vehicle (SUGV) Block 1 and a network integration kit (NIK).

The NIK, for example, is designed to provide increased functionality in battle command by providing the introduction of the FCS network and fusion of current-force capability with the future force. Elements of the kit include the joint tactical radio system (JTRS) ground mobile radio, integrated computer system; multiband antenna and range extension relay to provide extended range for the T-UGS information, provided over the JTRS handheld, manpack, small form-fit radio running Soldier Radio Waveform, back to the NIK and then forward to tactical operations centers.

"The capabilities within this set were derived from the Future Combat Systems program and have been in testing for the better part of a year and a half at Fort Bliss, Texas, with soldiers from the Army Evaluation Task Force," Mehney said. "They've been working on the equipment, establishing tactics, techniques and procedures (TTPs). More importantly, they have also been looking at how the equipment has matured, whether it is reliable, whether it works in operational constructs that include offensive, defensive and stability operations, and whether this capabilities set matches those needs for the Army."

During this period, the foundation for LUT was built on early company-sized situational training exercises in which members of the 1,125-soldier AETF began to flesh out TTPs as well as force development test and evaluation, a Training and Doctrine Command evaluation to help validate doctrine and emerging TTPs and to certify the unit as "trained" to enter LUT.

Calling LUT a "key test," Mehney cautioned, "All of our equipment is not in final configuration yet, so we are going to have a few more tests in 2010. But this LUT, which is an independent test conducted by the Army Test and Evaluation Command (ATEC), will help prove whether this technology not only works in an operational environment but is also technically mature enough to advance through stages of production to start getting this equipment out to soldiers."

"We're the Army's only independent tester," said COL Steve Duke, who led the LUT data-collection effort for ATEC with a team of 265 soldiers, Department of the Army civilians and civilian contractors. The ATEC team members were divided into four primary skill sets, including instrumentation, data collection and processing, command and control, and subject-matter experts/observer-controllers.

The LUT "blue force" participants focused on a "battalion-minus" sized element from the AETF. The unit's 2nd Combined Arms Battalion (2 CAB) provided command and control, and 2 CAB's Charlie Company—with two Humvee-mounted weapons platoons and two dismounted platoon elements—was supported by a reconnaissance

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Scott R. Gourley, a freelance writer, is a contributing editor to ARMY Magazine.



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SGT Garrett Haverkost operates a Class I Block 0 unmanned aerial vehicle, one of four that Charlie Company tested.

platoon from battalion headquarters, providing the primary operational maneuver forces. In addition, the brigade's fires battalion provided an NLOS-LS platoon, fire-support element and other fires personnel.

The additional supporting units facilitated the testing of the enabling technologies. In the case of Class 1 UAVs, for example, Charlie Company would normally have two air vehicles. Two additional UAVs, however, entered the test from the additional battalion reconnaissance platoon.

LUT "opposing forces" were drawn from the AETF's 1st Combined Arms Battalion and included a mechanized infantry platoon, tank platoon and paramilitary forces. Opposing force (OPFOR) capabilities included tank decoys, indirect fire (mortars) and signals intelligence capabilities. The presence of 21 role-players serving as "civilians" on the battlefield provided additional realism and tactical challenges.

The LUT featured a series of 96-hour missions; each incorporated offensive, defensive and stability operations. The iterations were separated by single "pause days," primarily used for equipment reset and after action review.

"The pause day allows us to do a quick check on our data-collection processes to make sure they're still on track, that we're doing what we need to do, and to see whether we might need to increase the tempo of missions or slow the tempo down a little bit," COL Duke said.

The AETF commander, COL Randy Lane, also deployed his brigade tactical operations center to support the LUT. Along with providing brigade-level command-and-control input to the participating 2 CAB forces, the tactical operations center served the high-control function for OPFOR and myriad other test personnel.

"We try to control [the inputs] and meet a lot of objectives," COL Lane said. "For the test objectives, we want to make sure that we are getting the data on all of these systems. So we construct an exercise that gets at multiple objectives and then try to play a little bit of the puppet master to make sure they are all met, while at the same time allowing free play so that it is a valid test with blue forces and red forces going against one another. We don't always make it happen—sometimes they miss each other or miss what we were after. That's why we do multiple iterations."

A few dozen miles to the west, one of those LUT free-play actions was taking shape as elements from 2 CAB's Charlie Company began a "cordon-and-search" operation focused on White Sand's Adobe Village training site.

Summarizing the operation for a group of observers, COL Lane referenced the Class 1 UAV droning overhead, noting that the asset could "look into the village and tell you how many people are there and give you a good read on whether they have weapons or not."

"My OPFOR has gotten kind of cagey," he observed. "They lay their weapons down when the Class 1 is coming, which is probably how it would play out [in actuality]. They would not want to be seen with a weapon in their hands and be targeted. We can't take a shot at them or put indirect fires on them [when they are unarmed]. Then they pick them back up at a later time. It becomes a sequencing challenge of when the ISR assets are on station and when they're not, and then we will try to keep 'eyes' up above us continuously once the forces start to close on the objective."

With approximately 40 minutes "time on station" for each of the Class 1 UAVs, these sorts of sequencing chal-



An LUT observer-controller moves forward with Charlie Company elements. (Note soldier-developed external rucksack configuration for SUGV.)

lenges are just some of the initial-capabilities-package modernization issues being addressed in a wide range of soldier-driven TTPs and tactical lessons learned.

Many of the TTPs reflect the combat experiences of most members of the AETF. Following the conclusion of village operations, SPC Joshua Whiteland, an SUGV operator with Charlie Company, described a recent change to the mobility pack design.

"We've changed the way that we strap it on the rucksack the soldier is carrying," SPC Whiteland said. "They gave us a rucksack to put 'the bot' in, but they really didn't have a plan for how we were going to carry it. We were dropped off a couple of miles away, and we moved by foot to the objective. You can't just carry the bot by hand [versus carrying a weapon] because you lose some security. So we now basically strap it to the outside of the pack using a winch strap. That way I can press the button to power it on while we are still in movement. When we get there, I can just release it and off we go. That's one of the new TTPs we've developed."

While many of the emerging TTPs address specific aspects of system employment, for CPT Darius Anania, Charlie Company commander, the new systems are having a broader impact.

"They're part of my planning cycle—where I employ certain systems, where I can mitigate risk, and where I can economize forces," he said.

Asked about operational complications with the new equipment, CPT Anania said, "It comes down to tempo. When the tempo is fast—when it's really fast—it's hard to use the spin outs [initial capabilities package]. When it slows down, that's when you can use them. Sometimes you have to slow the tempo down in order to use them. I learned that the hard way a couple of times, slowing down in order to use a spin out when I probably shouldn't have slowed down. Even in raiding this objective today, you would want a 'violence of action' from your last covered and concealed position to the foothold. Then, once you get to the foothold, that's when you can employ your spin-out gear. But sometimes you don't leave your attack position; instead, you deploy your spin out first, in order to check out a possible improvised explosive device, then you continue. So it all comes down to tempo."

While the initial capabilities package is opening the doors to dramatic changes in the tempo of unit tactical operations, some things remain the same.

"It doesn't really change anything from my perspective," said Charlie Company's first sergeant, MSG Miguel De Los Santos. "I handle issues such as unit casualties, so there are no changes for my job. I still run things the same way. These new capabilities are mainly for our young warfighters."

Noting that he hears "all the feedback, positive and negative," he added, "We're here to test the new equipment that the Army wants us to test, and that's what we do."

As for the results of that testing, Jerry Tyree, director of integration for the AETF, explained that the ATEC limited user test data-collection results—including everything from hours and reliability to performance measures—will be incorporated into a report, likely to be released this month, that will support the Milestone C decision process (allowing system entry into low-rate initial production) now scheduled for December.

"The question is not whether everything is 100 percent, or perfect," Tyree said. "Instead it is whether we know enough and whether the risks are low enough that we could commit the resources to buy a brigade set of this equipment to take us into another series of tests in 2010, culminating in 2011 with the initial operational test and evaluation that gets us the production decision to go out and field this to the brigade combat teams." ★

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To: Company Commanders
From: Company Commanders

Zero KIAs as an Organizational Goal?

Throughout my two deployments and even recently, I've heard leaders prioritize zero KIAs ahead of mission accomplishment. They say, "My top priority is to bring every Soldier home alive." I'm always disappointed to hear this because it gives subordinate leaders and staff tacit permission to pull back from the fight to "accomplish the mission" of not losing a Soldier. Yesterday I read an article about a dynamic 1SG whose proudest accomplishment was "bringing every Soldier home." Shouldn't a Soldier's proudest accomplishment be "effecting real change in my AO," "defeating the enemy" or something to that effect? Leaders must be bold and train their Soldiers so they have every advantage when lead is in the air, but leaders must *not* shy away from contact simply because casualties might be incurred. Surely the importance of any particular mission plays a part in how this line is walked, but I know that the Army and my fellow units expect me to kill the enemy firing at me, not to break contact. It just seems to me that the "zero-KIA philosophy" leads to apparent tactical successes that collectively can add up to a strategic failure. We all hope not to suffer casualties, yes, but a command emphasis on averting casualties seems misguided and, frankly, unattainable. A unit can hole up on the FOB and not accomplish its real mission, yet still lose someone to a mortar. If our goal is to bring 'em all home alive, we're fighting handicapped.

Anyone else have thoughts on this?

—Erik Archer, 127th MP CO

James Schmitz
Past PL, 950th Clearance Company

Great topic! There are about a dozen things I could reference, but I think the Warrior Ethos and the idea of selfless service speak well to the issue. We volunteer to go into harm's way so others don't have to, and if Soldiers can't accept that fact, they're in the wrong business.

Reading LTC Dave Grossman's interview on MilSpace, I'm reminded of the long-term consequences of our actions. Doing our jobs effectively now will prevent many more deaths in the future. I'm interested in how other leaders have addressed this without seeming callous or indifferent, and I'm leaning towards: "No one left behind."

Tony Burgess
A/2-35 IN and LRSD, 25th ID

To echo what James said, I think this is a really important topic for us to talk about as a profession. I agree that "no one left behind" is in better keeping with our values ("I will never leave a fallen comrade").

I'd like to share a quote from GEN Fred Franks, USA Ret. He lost a leg in Vietnam, persevered and commanded VII Corps during Operation Desert Storm. This comes from a speech he gave to a group of soon-to-be commissioned officers:

> Sometime after graduation, and I cannot predict when, our nation will look to you to accomplish a mission of extreme difficulty and importance, one that only you and your Soldiers can do. I do not know the conditions, nor part of the world, nor even how long after graduation, but I do know you will be on the spot to deliver mission accomplished at least cost to the Soldiers our nation has entrusted to your command.

"Mission accomplishment at least cost to our Soldiers" is the way he addresses this issue. Our calling as leaders in this profession is to have a hot, blue flame that drives us to do everything we possibly can to prepare ourselves and our Soldiers for combat and to do everything we possibly can to set the conditions for mission accomplishment at least cost—but knowing full well that there is always a cost in war.

Pete Kilner
D/2-325 AIR

Thanks for raising this topic, Erik. I've heard other leaders express frustration about the same thing. I think that

CompanyCommand Glossary

ADC-M—Assistant division commander for maneuver, a one-star billet.
AO—Area of operations.
CO—Commanding officer.
COA—Course of action.
COIN—Counterinsurgency.
CTC—Combat training center.
FOB—Forward operating base.
IDF—Indirect fire.
KIA—Killed in action.
PSG—Platoon sergeant.
RTO—Radio telephone operator, the commander's communications assistant.
XO—Executive officer, the second-in-command of a company.
1SG—Company first sergeant, the senior enlisted member of a company.

the "bring everyone home" mantra sets a unit up for psychological problems, for several reasons.

■ Hell, if staying alive is our #1 goal, then why deploy? We can maximize our likelihood of "success" by staying at home with our families.

■ The enemy has a vote. Even the best leaders and best units—even if they're misguidedly putting casualty aversion first—can take casualties.

■ When those casualties occur, what's their meaning? If the Soldier was fighting to accomplish the mission our country sent him to accomplish, then his death has meaning within that cause. If, however, the "mission" was to "bring everyone home alive," then the death is actually the "cause" of mission failure.

Soldiers will bear any burden, pay any price to accomplish the missions of our country. We owe it to them to give them real missions—not to utter platitudes that sound good at first (on the surface) but ultimately undermine their reason for being a Soldier as well as harm their long-term mental well-being.

Joshua Shrader

HHC/ US Army Infantry Center

I agree with almost everything already stated. Biggest point I'd take away is the question, "What happens *when* you lose a Soldier?" Your leadership and Soldiers would then have to live with failing their #1 mission of bringing everyone home alive. The long-term consequences of that theme are really bad.

I think it's better to set everyone up to lose someone rather than to return with everyone. Every time I've gone downrange, I've had a serious talk with my wife and other significant players regarding different COAs. Once in Kuwait, I talked with my PSG/1SG and XO regarding themes I would want put across if I am the one to fall.

I've been extremely blessed in never having a Soldier killed, but I've sent a few out of country for wounds. I'd rather look the remaining Soldiers in the face and say, "Hell of a job out there today" than have to say something like, "Well, we couldn't avoid this KIA, but we'll start over; no more KIAs from now until we go home."

Scott Shaw

A/2-14 IN & HHC/2 BCT/10 MTN

This topic is something that I have thought about through three deployments and continue to think about as I face another shortly. My company was at Buehring in deployment #2 to Iraq when the ADC-M briefed the assembled brigade leadership (CO/1SG and above). He told us that any unit that comes to Iraq with the expectation of zero KIA is setting itself up for failure. 1SG and I went out of the tent in a rage! I looked at my 1SG and said, "Well, that's not going to happen to us." He agreed, and we went angrily back to the tent.

Pete is right on so many levels.

The enemy *does* have a vote; it's a large one. Even the best company commander, platoon leader and squad leader has a day when the bad guy has a leg up.

Why even deploy? To shirk your responsibility by ignoring the things that happen around you or that you can affect is dereliction of duty. I would call it conduct unbecoming an officer, noncommissioned officer and Soldier. I like the draw from President Kennedy: "We will bear any burden, and pay any price." While keeping the boys safe was at the forefront of my mind, not one time did we shirk a mission, fail to patrol an area or otherwise fail to do our duty. Were there roads that we wouldn't drive at night? Yes. Did we always ride in up-armored Humvees and hotbed when we didn't have enough? Yes. Did we always wear body armor and Kevlars even when it sucked? Absolutely. But we never put out one patrol when the threat level called for two, and when it called for more than three patrols at a time, we split platoons and did that.

Killed and wounded Soldiers' lives and actions absolutely have meaning. That's why if you are going to put them on the streets, then there needs to be a reason for it. I can buy, "That's where we have seen some action before" (I am talking about presence in the AO); I can't buy driving around just to drive around.

Fortunately, we did not have anyone killed. Twenty-two Purple Hearts on that deployment, none on the next, but we came close too many times to count. 1SG and I were able to look each other in the eye after the deployment and say, "We did it." It was with tears because our last wounded Soldier had returned from the hospital and was standing in formation.

What I wish is that rather than a general officer lecturing us on this topic, we would have had an open and honest dialogue at the battalion level about it. When I deploy this next time, my comments will start with, "You can't protect everybody all the time."

Mike Wetter

A/3-265 AD

Mission first, people always. No one wants KIAs; however, a failure to put your mission as top priority could re-

sult in failure of the higher headquarters' mission (and so on up the food chain). Eventually, a preoccupation with avoiding casualties could potentially lead to a strategic failure, causing more Soldiers and civilians to become KIAs. I've actually heard another officer say, "F*** the mission," followed by a "people-first" message. (Unbelievable, I know.) The troops reacted strongly against him, for good reason. "Mission first" is ingrained in all Soldiers from the moment we join the Army. Our Soldiers can and will sense the wrongness in the opposite message.

Eric Balough
HHC/1-16 IN

Josh, you make an awesome point in that *when* leaders with a no-KIA goal lose a Soldier, they have just failed their #1 priority, so after that, nothing else will really matter.

I personally view the "We will bring everyone back alive!" as a "zero-defect" mentality. It's unhealthy, it does not lend itself to mission accomplishment and it promotes more mistakes by guys trying to avoid mistakes. This ultimately will breed a "me-first" culture in a unit, and ultimately the very soul of the organization will crumble.

Accidental deaths in motor pools, negligent discharges, etc., are really the only forms of unacceptable deaths. If a Soldier's death could have been prevented through better leadership or by the Soldier's own choice, then that is a problem that needs to be fixed. When a Soldier dies in combat on our watch, we should be able to say that we did everything we could do to prepare him for the fight and to prepare his family for the worst; that we brought his remains back; and that we killed more than we lost. If the enemy "exercised his vote," as Scott and Mike aptly put it, then that is war.

Zachary Pierce
F/1-19 IN

I would prefer to be in a unit where my family and I are told that every (realistic) step is in place to ensure that I make it back intact, and that if I don't (through injury or death), my family and I will be cared for appropriately. That is a hard promise to keep, but it can be done with the personal sacrifice of time from leaders. If I see that level of commitment in my unit, then I'm going to move out and fight on the edge because I know that people have my back.

So if a couple of folks in the Army put it out as their #1 priority to keep everyone safe and sound and even cancel some missions just because of that, then fine. If the bad guys take time off here and there (and they do), then it isn't going to hurt us to do the same and mitigate some of those obviously unnecessary casualties by talking to our guys about safety. There *are* deaths in combat that get chalked up to the enemy when the truth is that we just screwed up somewhere, and sometimes that comes from pushing too hard for results when really we need to slow our roll.

I don't think that the concepts of mission accomplishment and bringing everyone home should be affecting each other to the extent that we ever have to choose one over the other. If you get to that point, however, I would say it might be time for a stand-down day.

Jonathon Burbach
C/1-105 CAV (RS)

It is a leader's responsibility to do everything possible to bring all Soldiers home safely without compromising the ability to accomplish the mission. This means exercising proper risk mitigation through training, planning, execution, adherence to SOPs and force-protection measures. It is unrealistic to outright declare or promise that any unit can bring every Soldier home safely. Even units that never leave the wire are subject to IDF. Most important is to ensure that Soldiers execute missions by taking measured risks that still allow the unit to meet its tactical objectives. The enemy's "vote" can never be eliminated, but measures can be taken to decrease its influence.



Zachary Pierce, F/1-19 IN, does not believe "that the concepts of mission accomplishment and bringing everyone home should be affecting each other to the extent that we ever have to choose one over the other."



Jamey Gadoury
C/1-9 IN

The most sacred obligation of the profession of arms is holding the lives of our Soldiers in our hands. I had an XO who observed, "Every commander gets his first god complex when he takes the guidon." This is nowhere more true, apparently, than commanding the power of life and death. Leader decisions can quite literally determine who lives and who dies—Soldier, enemy or civilian.

Good Army leaders have struggled long and hard with this burden. It is interwoven in "men versus mission," "proportionality and collateral damage," and "escalation of force." It contributes to personal pain, as articulated in LTC Dave Grossman's *On Combat.*



What is "most important," says Jonathon Burbach, C/1-105 CAV (RS), "is to ensure that Soldiers execute missions by taking measured risks that still allow the unit to meet its tactical objectives."

If the answer was as simple as "bring everyone home," then much of the dilemma would no longer exist. No need to "shout, show, shove, shoot"—just shoot. But morality, long-term practicality and the Army's reason for existence do not permit such an approach.

I remember the disgust I felt in the early days of the war when I heard a senior NCO exult, "We brought our task force in, and we brought our entire task force out alive." Maybe the helicopter medevacing a Special Forces Soldier who eventually bled out was too vivid in my mind's eye. Maybe I still heard our RTO relaying calls about a captured, killed or maimed special operator just a few kilometers from us. So what had our task force proven that the SF unit had not?

Despite this, I allowed the idea to foment. As I took command, I publically stated that I could never make that promise. Inwardly, I willed it so. If I did it right, if God was pleased, then somehow, this was attainable. I think good leaders earnestly want this and do everything to minimize risk—but they also recognize reality. I wanted a different reality.

Thinking this way invites devastation when that unspoken mission "fails." I consider December 6th, 2006, the worst day of my life. It also marked when I was forced to think differently. Somewhere in the eyes of the 100 infantrymen staring back at me was the imperative to move on. Their unspoken question—"Can you bring *me* home?"—translated into a directive to act, to be better.

It is a paradox, and the NCO Creed writes it as such. "My two basic responsibilities [are] accomplishment of the mission and the welfare of my men."

Jamey Gadoury, C/1-9 IN, acknowledges that "leader decisions can quite literally determine who lives and dies—Soldier, enemy or civilian." Good leaders, he believes, "do everything to minimize risk—but they also recognize reality."



"If the primary focus of a unit is 'bringing them all home,'" says Chris Nunn, A/2-87 IN & HHC/2-87, "what does this say about how the unit was trained and how the Soldiers view themselves?"

Chris Nunn
A/2-87 IN & HHC/2-87

Jamey—long time no see, hope all is well.

Great post and I couldn't agree more.

My basic assumption about leaders is that they want to accomplish the mission with the minimum acceptable risk to their soldiers. If they don't, we should probably assist them with resume building on monster.com.

There are so many issues that go into "accomplishing the mission versus taking care of your Soldiers" that create the paradox Jamey spoke of. As others have said, however, this is what we as leaders do. This starts with training Soldiers to the level where they are confident they can accomplish their mission, educating your leaders so they understand why the unit is executing these operations, and preparing, training and educating yourself for the weight of this responsibility. If you are confident in your abilities to properly plan and resource missions and war-game out tactical risks, that will translate down to your leaders. Ideally, all will come home because you did all you could, but the enemy still gets to vote.

I have seen units that reacted to the few casualties they had very poorly and took "bring everyone home" to heart by skipping the first three *S*s and going to "shoot." They were reactive for a whole series of reasons and caused problems in the AO for all of those reasons. They were more worried about what the enemy could do to them than what they could do to the enemy. They were not confident in their skills as Soldiers to accomplish their mission.

This type of mentality always makes me think back to something I saw long ago in Ken Burns' "The Civil War" series. Shelby Foote was speaking about a period just after GEN [Ulysses S.] Grant (understand he's not typically known for low casualty rates) took command of the Army of the Potomac and his subordinate commanders were saying, "Bobby Lee is going to do this and that to us." Grant immediately replied that they had better stop worrying about what Bobby Lee was going to do to them and start worrying about what they were going to do to Bobby Lee—he had to change their mentality from reactive to proactive.

If the primary focus of a unit is "bringing them all home," what does this say about how the unit was trained and how the Soldiers view themselves? What does this say to the Soldiers in that unit about why they are deployed, executing missions under this intent? In a different post in the CC forum, Niel Smith commented that one of the problems we had in fighting COIN and defeating the enemy is that, back in the day, victory at the CTCs was equated to the enemy being slant/zero. If you equate victory as zero KIAs, what is your unit really working toward?

If you are a currently commissioned officer who would like to engage in professional conversation about company-level leadership, we invite you to join us at http://CC.army.mil.



Soldier Armed

Army Assesses Expanded Intelligence-Sharing Capabilities

By Scott R. Gourley

The U.S. Army recently "took to the field" to assess its next generation of intelligence-processing capabilities developed under the Distributed Common Ground System (DCGS) enterprise. The DCGS program establishes a core framework for a worldwide-distributed, network-centric, system-of-systems architecture that allows the conduct of collaborative intelligence operations and production. Distributed Common Ground System-Army (DCGS-A) interfaces with other DCGS nodes through a common network known as the DCGS Integration Backbone (DIB).

Three new DCGS-A elements were part of the recent assessment: DCGS-A software Version 3.1 (v3.1), the Mobile Basic System and the DCGS-Enabled Common Ground Station (DE-CGS). The three systems were set up in one corner of what's known as the "Danville" Tactical Battle Management Site at Naval Air Weapons Station China Lake, Calif., for Empire Challenge 09.

Conducted July 6–31, Empire Challenge is an annual live joint and coalition intelligence, surveillance and reconnaissance (ISR) interoperability demonstration executed by U.S. Joint Forces Command (USJFCOM) under the sponsorship of the Under Secretary of Defense for Intelligence.

LTC Michael Dunning, who works under the U.S. Army Training and Doctrine Command (TRADOC) Capabilities Manager for Sensor Processing and served as the DCGS-A officer in charge at Empire Challenge, was quick to emphasize that the developments reflect the coordinated efforts between the TRADOC Capabilities Manager, the U.S. Army Program Manager for DCGS-A and their supporting joint service/industry/contractor team. "This is a team effort, working together, to assess our systems out here at China Lake and here at Danville," he said.

Battlefield Contributions

Moving into the Tactical Operations Center, LTC Dunning offered an overview of the contributions of DCGS-A to the battlefield: "What is DCGS-A? Why is it important? What difference does it make to the intelligence architecture for the Army? What is it that we bring to the fight here at Empire Challenge, and what is it that we will bring to the fight later on for the Army as a whole?" he asked. "If I'm a system user, a soldier out in the field," Dunning continued, "and I have my laptop or the computer in front of me, what does this bring to me? First of all, it gives me the ability to 'see'—to access more information or data than ever before. For example, take a single unit intelligence report that a soldier does in Iraq or Afghanistan when he's out on patrol. He comes back and puts it into the system, into the database. Now I can access that data from 200, 300, or 5,000 miles away, along with other data, all the way up through division to corps level, to national, to multinational, to coalition and even to open sources like print media or television news. It allows me, as the user, and my soldiers to access all of that information wherever we happen to be."

"That's critical," LTC Dunning added, "because I can see, not just at my brigade level, but I can see what everybody is doing. That helps me, as a user, to understand."

"Let's say I have a mission," he continued. "My boss directs me, 'You need to go see where this particular bad guy is. I want you to get as much data as you can on this high-value target.' I gather the data, and I have what are called common analyst tools on my laptop. These are 'multi-intelligence (INT)' tools—signals intelligence, im-



Soldiers from the 470th Military Intelligence Brigade monitor battle flow from the Distributed Common Ground System-Army (DCGS-A) software Version 3.1. The DCGS program allows the services to collect and share intelligence, surveillance and reconnaissance (ISR) information.



At the Tactical Battle Management Site called Danville, at Naval Air Weapons Station China Lake, Calif., three new DCGS-A elements were tested during Empire Challenge 09, an annual live joint and coalition ISR interoperability demonstration designed to test emerging technologies in a real-world environment.

agery intelligence and human intelligence—and this provides a commonality across the board. So if I have a laptop at any location, I can access the same information using the same common analyst tools. I can access all of this data on my laptop—that's really the heart and soul of what goes on here in DCGS-A."

Once the data has been accessed and information has been developed, the next step is the production of intelligence for the commander. "The commander needs that intelligence on the ground to make the warfighting decisions, within his decision cycle, in a timely manner," LTC Dunning said. "In the past, he had to wait. For example, if you were at a brigade, you had to wait for division to send you data. If you were at a division, you had to wait for corps to send you data. Sometimes that could take hours. When I was a brigade S-2, I had to wait for some information for up to four or five hours. That wasn't good—my boss, that O-6 brigade commander, wanted that data so that he could make a decision in a timely manner.

"Keep in mind that with a lot of what's going on in the field right now, a brigade combat team could be covering an area of operations that could be division-sized. It could be a village. It could be a town. It could be multiple villages. They could have border operations going on. Those commanders have to be able to 'see' and get that data in a timely manner, and this allows them to do that, using common analyst tools, whatever INT it might be," LTC Dunning continued.

Expanded Software

Highlighting the participation of the new v3.1 software, SFC Samuel Rodgers, NCO in charge for the v3.1 element, explained, "This is slowly replacing the old All-Source Analysis System tool that we, as all-source analysts, use. This represents a big upgrade as far as using the equipment to do our jobs is concerned. Also, the system is already fielded, with roughly 400-plus units in the world. So this has already been assessed and used—we're out here to assess the interoperability between this and the newer system designs, such as Mobile Basic and DE-CGS, and also data/information sharing with other DIB systems.

"That means that we, the intel analysts, will go out 'into the DIB' and find all of the information and data that we need from all the different INTs. That way we can produce the bigger picture for the commander. Then we manipulate, analyze and create 'products,' and then publish that data into the DIB."

Expanding on the issues surrounding interoperability, Dr. David Usechak, v3.1 program technical lead, explained, "DCGS-A is part of the family of all of the DCGS Department of Defense systems within the intelligence world, and our number-one requirement is to share data and information. The way we do it is through the DCGS Integration Backbone, and a key component within the DIB is a metadata catalog." Often dubbed *data about data* or *information about information*, metadata relies on methods to describe, identify or locate a specific information resource.

"This is all about metadata in the enterprise," Usechak continued. "You've heard LTC Dunning and others talk about 'generating products' for the commander. Well, we have metadata on that, and it is now posted to the metadata catalog. Now the corps, for example, can search the enterprise or have a standing request to search the enterprise for specific metadata, and then they can get the appropriate product generated at brigade.

"Other capabilities that we have in v3.1 that will be propagated throughout the rest of DCGS-A are common tools such as mapping, symbology using standard military symbology, and a common look and feel portal," he added.

The need for a common look and feel reflects a management and logistics reality that v3.1 has been fielded on commercial-grade hardware, and the realities of rapid turnover in that

arena translate to the mandate for sequential fieldings of the same software version of different hardware systems.

Expeditionary Designs

DCGS-A is currently found at fixed intelligence sites like the 66th Military Intelligence Brigade in Germany or the 513th Military Intelligence Brigade at Fort Gordon, Ga.

"Those are places that have been around for a while, and they have this in buildings, not in tents," LTC Dunning noted. "Those fixed sites have 'large pipes' to get data. They have cooling systems, so you don't have to worry about your systems burning up in 115-degree heat. But we're here in a mobile site; this is what the Army is assessing out here at Empire Challenge. Remember, the Army is now an expeditionary force."

Emphasizing that the Army's DCGS participation in Empire Challenge was an assessment and not a test, LTC Dunning explained that the Army's objectives were closely tied with those of the USJFCOM lead.

"What we want to do is assess our ability to gather information; to get the data that is ingested; to process that data; to produce a product for the commander, intelligence; and then to disseminate that information," he said.

Additional Empire Challenge activities included software development as well as a critical opportunity for Army participants to "get on" some of the new systems, work the common analyst tools, and provide additional feedback to program planners and contractors.

Mobile Basic System

As an example of developments catered to the Army's expeditionary requirements, Empire Challenge marked the first time that the new Mobile Basic System had moved to a field environment from a laboratory setting at Northrop Grumman. As a next-generation developmental system, Mobile Basic brings together under one platform the capabilities from nine currently fielded existing programs of record, an effort that will significantly reduce both logistics footprint and cost.

Examples of some of the systems being "absorbed" into Mobile Basic include the Common Ground Station (CGS), Tactical Exploitation System, All-Source Analysis System and Integrated Meteorological System.

"We have common analyst tools at the analysts' disposal," explained Steve Kalinock, Northrop Grumman lead for Mobile Basic. "What they do is bring together all of these separate types of intelligence data and fuze it into a single situational awareness product, basically a multi-INT product. Then it will be posted onto the DIB, and once it is out there it becomes federated and available to anybody who needs to use it, from the warfighter up to the battlefield commander."

DCGS-Enabled Common Ground Station

The DE-CGS that participated in Empire Challenge reflects a quarter century of evolution in vehicle-based common ground station design.

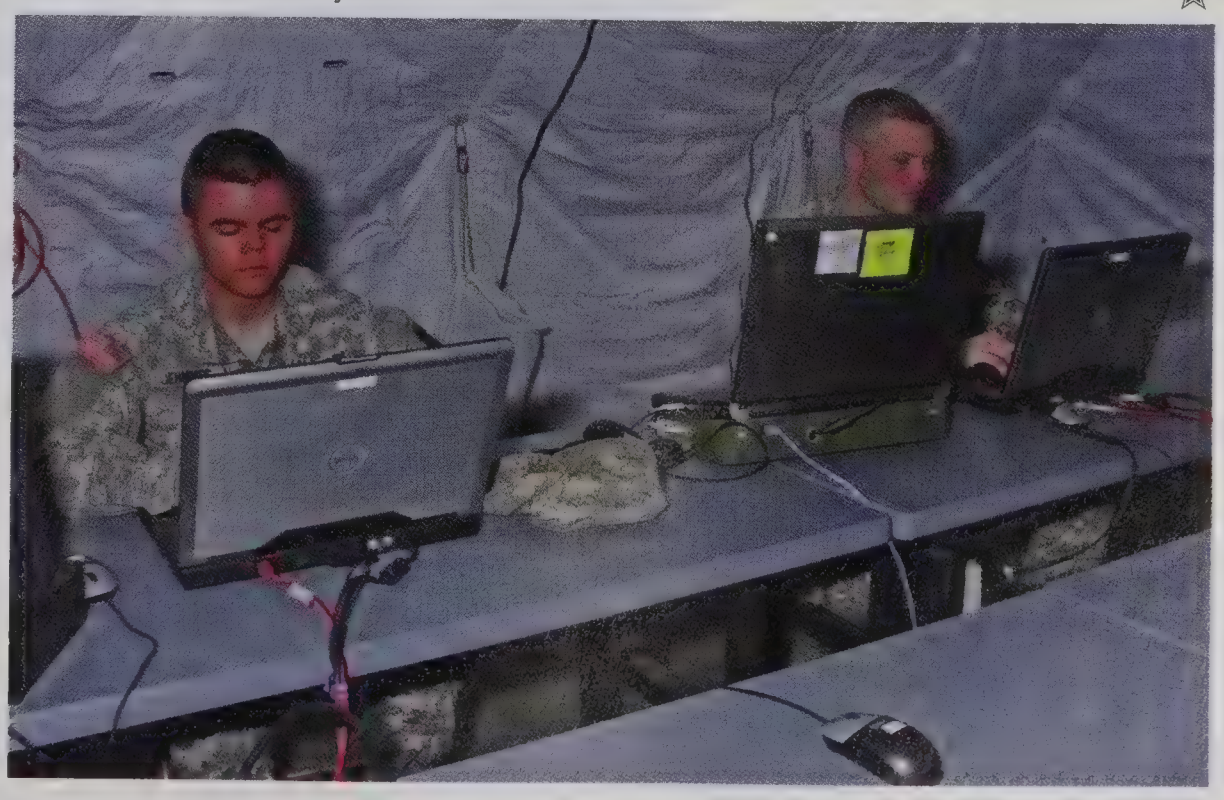
According to Jim Miller, DE-CGS technical lead for General Dynamics, the evolution began in 1984 with sensors on the OV-1D Mohawk and continued through the interim ground station module of Operation Desert Storm to today's CGS designs.

"There are 99 common ground stations in the U.S. Army, with that fielding starting in 1996," Miller said. "That hardware is now getting old, so we started upgrading some of those in 2006. This year, we're doing what we call a Group 6 Upgrade, which is a new set of hardware using commercial off-the-shelf products."

The Empire Challenge assessment focused on the next generation of mobile ground stations, DE-CGS, which Miller described as "a sensor and communications vehicle." Its primary role is to accept datalink feeds from a range of manned and unmanned ISR aircraft platforms.

The four-part assessment included: ensuring DE-CGS capabilities to perform the same functions as currently fielded CGS; assessing new capabilities, like the one-station remote video terminal's video capabilities, and assessing new exploitation tools; developing soldier "hands-on" feedback to the development process; and assessing the interoperability of DE-CGS data flow to both DCGS Version 3.1 and Mobile Basic System.

"We're here to ensure that our system can receive, process, disseminate and exploit the data that we receive and share it within the DCGS-A, v3.1 and Mobile Basic System," summarized SSG Randall Peters, NCO in charge of DE-CGS participation at China Lake. ★



The Army's new Mobile Basic System (MBS) brings the capabilities of nine existing programs together under one platform. Empire Challenge 09 marked the first time MBS was assessed in a field environment. DCGS-A allows the user to retrieve any information in the database regardless of location.

AUSA Sustaining Member Profile

Graflex Incorporated

Corporate Structure—Founded: 1993. Executive Vice President: C. Paul Ganther. Headquarters: 15855 Assembly Loop, Jupiter, FL 33478. Telephone: 561-691-5959. Web site: www.graflex.com.

Graflex Incorporated is recognized within the field of fire-control systems as the world leader in the manufacture of muzzle boresight devices. The company also has developed, designed and now manufactures a broad line of sensor positioners, or "pan and tilt" devices. In addition, Graflex has always been involved in the video business, primarily focusing on ruggedized day sights for military applications.

The founders of Graflex were once the primary shareholders and management of Lenzar Optics Corporation, a company focusing on products similar to those of Graflex (except for sensor positioning) in the 1970s. Following changes in ownership and management, Lenzar was dissolved, and Graflex Incorporated emerged in the early 1990s.



Graflex is a relatively small yet highly capable company, drawing most of its engineering expertise from a database of highly qualified individuals from many engineering fields. With a primary goal of internal funding of all research and development efforts, an emphasis on low overhead expenses and a policy of strictly limiting growth only to meet production requirements, Graflex hopes to remain a tightly controlled company with zero outstanding debt. Graflex views its employees as family members: Each individual is key to survival and success.

The principals, management and employees of Graflex strive to provide—and will accept nothing less than—100 percent customer satisfaction. In this relatively small company, all employees are keenly aware of each customer's requirements. Without its customers' complete satisfaction, the company would cease to exist. A high percentage of Graflex's sales are transacted with those customers with whom the company has had a previous and, in most cases, long-term relationship—a testament to Graflex's commitment to customer satisfaction.

In 2006, Graflex moved into its current facility in Jupiter, Fla., specifically built for and well-suited to light production, featuring optical and electronic test labs; primary and product-specific production areas; warehousing; and metal working. The building encompasses 16,000 square feet, including 6,500 square feet dedicated to metal working, 4,000 square feet to production and 3,000 square feet to warehousing. Following some very tumultuous hurricane seasons, the building was designed and built to withstand up to and including Category 5 storms.

Tight control and a keen focus on core products have enabled Graflex and its employees to achieve the pinnacle of quality and success. Graflex was presented the Blue Ribbon Quality Award by the Defense Contract Management Agency for outstanding achievements—namely, not shipping a single defective item (muzzle boresight devices) to the U.S. Army over a span of 10 years. The company's commitment and an unblemished track record continue.

Graflex is the U.S. military's primary source for muzzle boresight devices, also known as sight-alignment tools. Boresights are used to align the mechanical centerline axis of a gun tube with a gunner's sight and are a critical component in the lethality of modern fire-control systems. Graflex boresights are also used by many foreign armies. The benefits of precision boresighting include increased lethality, strike ratios and crew confidence as well as decreased ammunition expense.

The addition of sensor positioners as a core product represents a major investment for Graflex. As such, emphasis was placed on superior perfomance, features, low mean time between failures, and low life-cycle cost throughout the development and design effort. Sensor positioners are used to position antennas, surveillance equipment and similar technology in a particular direction and are used on stationary, maritime or ground vehicle platforms.

The name *Graflex* has been associated with the video industry for many years, namely Graflex cameras, a product line that was dissolved more than 35 years ago. Since then, Graflex has been involved in the design, development and manufacture of refractive and catadioptric zoom lenses; image intensified systems of all types; related image enhancing hardware and software; and, most recently, fixed and variable field-of-view plastic optical systems. Although the technology of plastic optics is still in its infancy, the benefits of a high-performance, lightweight, inexpensive alternative to conventional optics is intriguing and will certainly affect the market as the technology advances.

Graflex Incorporated will continue on the path of exceeding each customer's expectations, embracing its employees as family, and manufacturing products that unquestionably display the highest level of quality, performance and value available in each of the markets served.

Reviews

Stirring Account of an Armored Cavalry Squadron at War

Warrior's Rage: The Great Tank Battle of 73 Easting. *Douglas Macgregor. Naval Institute Press. 288 pages; maps; diagrams; black-and-white photographs; index; $29.95.*

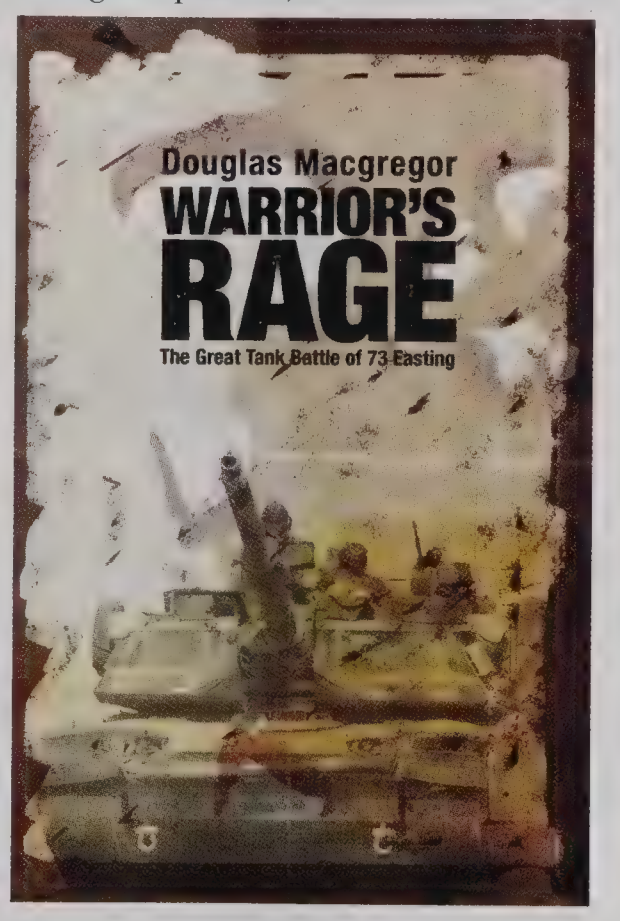
By MG Daniel P. Bolger

Remember Desert Storm? Few Americans do. It was that "other" war with Iraq, the one that wrapped up neatly in six weeks. After a daily diet of impressively precise air-strike footage and a hundred-hour blitzkrieg across southern Iraq and Kuwait that outran the enemy and most of the news cameras, America declared victory. A broad coalition had been formed, Kuwait had been liberated, Saddam Hussein's Iraq was humiliated and the ghosts of Vietnam were exorcised. So it seemed for a few shining weeks in the spring of 1991, when Americans again fell in love with their seemingly invincible Army.

They still love us, but the marriage has gone through some very rough times of late. The honeymoon of the armored pursuit has given way to the daily plodding of kicked-in doors and ugly aftermath of roadside bombs. We have seen plenty of fighting in Iraq since the lightning campaign of 1991. With the exception of a few episodes in March 2003, it has been anything but armored combat, and anything but rapid or decisive. Talking today of war in Iraq, the average American may conjure up images of courage, remorse or frustration—but certainly not the lethal clash of tank on tank.

In *Warrior's Rage,* Douglas Macgregor reminds us of what happened in that first American war with Iraq. It was not all about airpower, nor the ennui epitomized in Anthony Swofford's well-crafted and well-praised book *Jarhead.* In February 1991, a number of Americans charged into battle in a style that would have befitted George Patton himself; Macgregor was one of them.

Warrior's Rage is the inside story of an American armored cavalry squadron at war. Macgregor has done his homework—he both sets the stage and delivers the promised show in this stirring account of the Gulf War's major armored fight along the grid reference known as 73 Easting. Macgregor draws us into the world of the 2nd Squadron (Cougar Squadron), 2nd Armored Cav-



alry Regiment. Today most serving American officers and NCOs have been in many firefights, but that was not so in February 1991. In addition to explaining how a squadron organizes, trains and fights, Macgregor must also account for what happens when soldiers of all ranks first "see the elephant."

And see it they did, in the gloaming of the afternoon of February 26, 1991. Leading the entire VII Corps, Macgregor and his Cougars advanced right into the Tawalkana Mechanized Division of the Iraqi Republican Guard. The resulting armored contest pitted American cavalry troopers in their M1 Abrams tanks and M3 Bradley cavalry fighting vehicles against T72 tanks, BMP fighting vehicles and MT-LB personnel carriers manned by Iraqi veterans of the grinding war with Iran. In poor light, blowing dust, and the fog and friction of combat, Macgregor and his men smashed their foe. But victory did not come easily, nor cheaply. America's splendid hundred-hour war was the usual butchery at the business end. That's where Macgregor and his Cougars lived and died.

It is that immediacy and intensity of close combat that *Warrior's Rage* evokes. Macgregor depicts war as it is experienced and fought, not with neat arrows on a well-drawn map, but with seared flesh, grit, blood, dirt and pain. Exhaustion, confusion, fear and death define the world of Cougar Squadron; Macgregor describes every bit of it. Yet he also grants us a glimpse into how soldiers deal with such grim realities—leadership, discipline, training and humor surely help. *Warrior's Rage* includes all of those as well.

A book like *Warrior's Rage* would normally be on the reading list of every fighting battalion in our Army. Some will hesitate at that, though, because there is a strong subtext to Macgregor's account. It's a truism of war that although good units are composed of team players, most soldiers know well that when you close that hatch, few have much good to say for "those bastards back at platoon." That is a normal part of a soldier's point of view. The dangers of combat only serve to amplify this tendency.

Macgregor does not spare us his opinions about his superiors. He castigates America's generals as a group—and often by name—for what he sees as their timidity in finishing the job in 1991. By implication, and in many cases by bald statement, a reader of *Warrior's Rage* would not be surprised

that these generals' chosen successors have fumbled around in the current war as well.

That may turn off some readers, but I would encourage those offended to hang in there. Believe it or not, such things get said about most leaders in the Army—maybe even Macgregor. As soldiers, we have learned after a lot of failed operations at the National Training Center—let alone on the ground in theater—to be brutal on ourselves, to ask the hard questions and to own up to mistakes. Our Army judges by results more than by form or style. The ability to adapt under fire is the key to winning. Macgregor's Cougars did it at 73 Easting, but it all starts with having the guts to accept criticism.

Macgregor himself offers the best explanation for why his harsh tone still makes *Warrior's Rage* well worth the read. At one point, describing a particularly headstrong cavalry troop commander (now a serving general officer), Macgregor approvingly quotes Werner Binder, a German officer who fought on the Eastern Front in World War II: "Your best commander is always your most difficult subordinate. He always asks hard questions and offers new ways to do things, because he thinks. He may be quick-tempered and occasionally insubordinate, but if you have one like this, give him the freedom to do what he thinks is right whenever possible."

Macgregor did just that, and the outcome was a signal victory. I think Binder's advice may be good for anyone who reads *Warrior's Rage*. The author of *Breaking the Phalanx* and *Transformation Under Fire* has never been a shrinking violet—Macgregor was always a most difficult subordinate. But he's also one of the smartest and most gifted armored commanders our Army has produced. *Warrior's Rage* is just the latest fine contribution from a veteran cavalryman who will no doubt stay in the fight for the Army he loves.

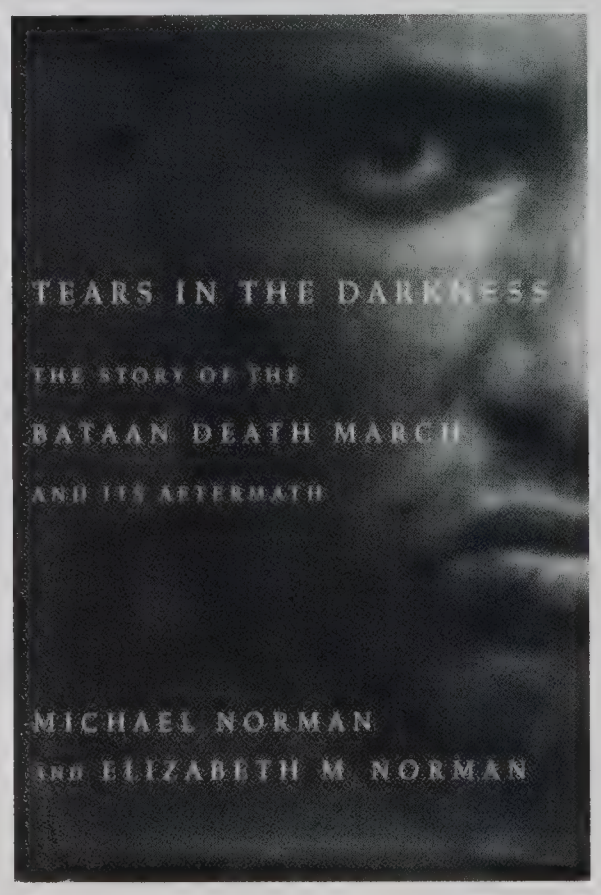
MG Daniel P. Bolger is the commander of Multi-National Division-Baghdad and the 1st Cavalry Division.

An Inexpressible Sadness

Tears in the Darkness: The Story of the Bataan Death March and Its Aftermath. *Michael Norman and Elizabeth M. Norman. Farrar, Straus and Giroux. 464 pages; black-and-white photographs and illustrations; index; $30.*

By Rick Zollo

The expression "tears in the darkness" comes from a translation of the Japanese ideograph for *anrui* (on-RUE-ee), or "inexpressible sadness." The term also serves as the title of Michael and Elizabeth M. Norman's powerful new book, subtitled *The Story of the Bataan Death March and Its Aftermath.* The Battle of Bataan, a more than three-month battle fought on a Philippine peninsula by American and Filipino forces against Japanese invaders in early 1942, was followed by the surrender of some 76,000 American and Filipino troops—"the single largest defeat in American military history"—which precipitated a 66-mile death march and subsequent internment in a prisoner-of-war camp.



Bataan's saga highlights a clash of cultures—Japanese versus American—as well as dehumanizing brutality. *Tears* documents this brutality along with the inexpressibly sad aftermath for its combatants. *Tears* follows a number of soldiers on both sides but focuses particularly on a young Montana cowboy and artist, Ben Steele, an Army Air Corps mechanic serving at the Philippine air base Clark Field. Steele's experiences and drawings, pulled from memories and POW camp sketches, add to *Tears'* documentary power.

The Normans spent a decade on *Tears*, making multiple trips to Asia and conducting more than 400 interviews with various Bataan veterans. Michael Norman is a former Marine who fought in Vietnam and worked as a reporter for the *New York Times.* He wrote *These Good Men: Friendships Forged from War* based on his military experiences. His wife, Elizabeth, has written *Women at War: The Story of Fifty Military Nurses Who Served in Vietnam* and *We Band of Angels: The Untold Story of American Nurses Trapped on Bataan by the Japanese.* Both Normans are professors at New York University.

As the Normans make clear, Japan's war with America presented a collision of empires. Each side underestimated the other. American officials suspected something from the Japanese, but were surprised by the Pearl Harbor attack. Action soon spread elsewhere, with the Japanese depending on surprise to hold their conquests. The bombing of the Philippines was meant to coincide with Pearl Harbor, but was delayed for six hours due to bad weather. Once the war began, Japanese soldiers fought with ferocity that came from their training. The soldiers had been inured to pain and were expected to sacrifice their lives for emperor and nation. They were following the concept of *Bushido*, the "way of the warrior."

Americans and Filipinos also made sacrifices, but Americans, defined by their national character as individuals, held personal survival in high regard. The Japanese could not understand this concept. To them, warriors who surrendered did not deserve to be treated as humans, thus explaining the brutality of the forced march and prison camp.

In a subplot to frontline action, *Tears*

presents the commanders of each side. GEN Douglas MacArthur was in charge of American and Philippine forces, and his actions come under harsh treatment by the Normans. MacArthur knew about the attack at Pearl Harbor yet did nothing to prevent a similar attack on the Philippines; this failure led to the destruction of American air forces stationed at Clark Field, setting the stage for the Battle of Bataan. MacArthur was also obsessed with self-promotion. In contrast, the Normans present MacArthur's Japanese counterpart, Gen. Masaharu Homma, as a man whose love for Western culture made him reluctant to pursue the *Bushido* way of war. (Homma's reluctance eventually led to his forced retirement after the Bataan surrender.)

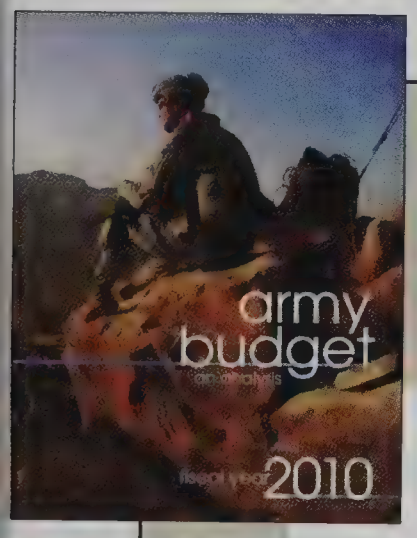
Tears spends more time with frontline troops than with generals, however. The reader follows Ben Steele through all the aspects of Bataan—its mass murder, torture, starvation and multiple diseases. At one point, a disease-ravaged Steele is on his deathbed, given the Catholic sacrament of last rites by a Maryknoll priest also confined to camp. He eventually recovers, and his drawings and testimony bear witness to war's dehumanizing effects on both sides of the battle.

As the war turns against the Japanese, Steele is sent to Japan to work in slave labor camps. American forces island-hop toward the Philippines and Japan, setting up the war's climax—atomic warfare on the cities of Hiroshima and Nagasaki. At that time, Steele is interned in a mining camp some 55 miles outside Hiroshima. He and other prisoners are told they will be killed if and when the Americans invade the island, but after the Hiroshima bombing they are released, sent to military hospitals to recover and eventually return home to reintegrate into civilian life.

Tears' last section follows Steele through hospitals, back home to marry and father a child, and then to Ohio to study art. Balanced against this return home, *Tears* portrays Gen. Homma's trial and execution as one of the war's many injustices. The Normans portray the trial as a setup so MacArthur can expiate his failures to defend the Philippines. The American Caesar, so called by historian William Manchester, has not only returned to his beloved Philippines in victory, but has gone to Japan to rule as supreme commander of the Allied powers. He presides over the war trials in absentia, effectively serving as Homma's judge and jury. Homma goes to his death with great dignity, another of war's "tears in the darkness."

Tears is a notable achievement, justifiably compared by its publisher to such classics as Erich Remarque's *All Quiet on the Western Front* and John Hersey's "Hiroshima," which *The New Yorker* published in 1946. Its eloquence informs us of war's horrors and our need to coexist with our neighbors.

Rick Zollo *is a freelance writer from Iowa City, Iowa. His work has appeared in the* Chicago Review, Shenandoah, Common Quest, *militarylifestyle.com and other publications. (See pages 32-36 for more information on Ben Steele.)*





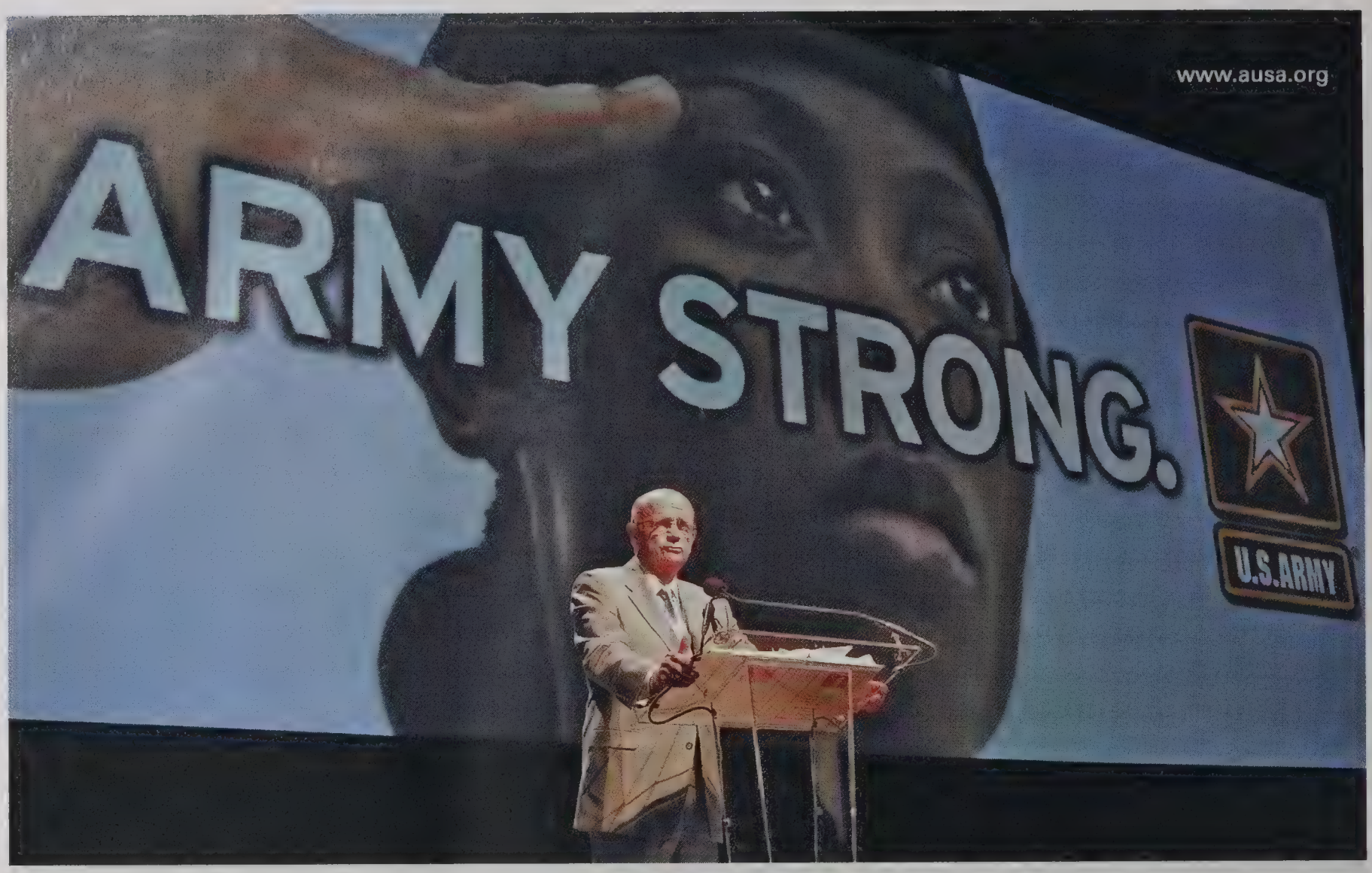
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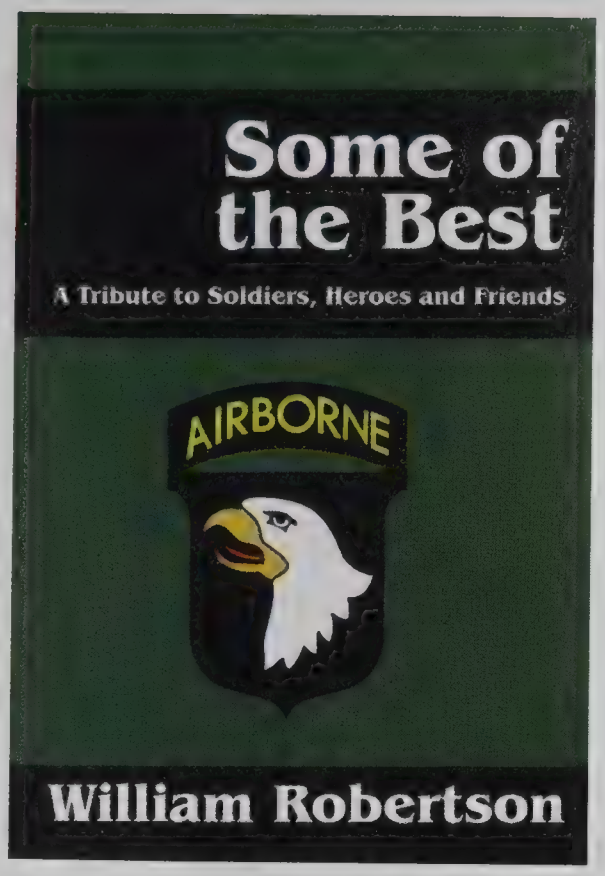
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Briefly Noted...

Some of the Best: A Tribute to Soldiers, Heroes and Friends. *William Robertson. Outskirts Press. 286 pages; black-and-white photographs; $13.95.*

In *Some of the Best,* Vietnam War veteran William Robertson recounts his years in the U.S. Army from his West Point graduation in 1964 to the end of his tour in Vietnam in 1968. Drawn from Robertson's own memories, letters and diary as well as recollections of fellow soldiers, after action reports and secondary sources, *Some of the Best* provides a vivid account of life in the U.S. Army as the war in Vietnam escalated.

Throughout his Airborne and Ranger training and initial 101st Airborne Division assignment, Robertson followed the developments in Vietnam through news reports and the reports of buddies in theater. In late 1967, Robertson was assigned as the communications officer of 2/17th Cavalry, 101st Airborne, serving under then-LTC Julius Becton. He served in Vietnam from December 1967 through November 1968, in Song Be during the Tet Offensive and in Hue and Thua Thien Province during the counteroffensive. Robertson relates his personal experiences in Vietnam—firefights, mortar attacks, ambushes and battles, as well as bonding with fellow soldiers and the loss of comrades—in context with other battles and events shaping the course of the war, providing both a personal account of the Vietnam War and a more general history of the war during those years.





"I had a good day. I raised everybody's blood pressure."

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Editor in Chief
October 7, 2009

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Historically Speaking

The Fall of the Wall at 20

By BG John S. Brown
U.S. Army retired

On November 9, 1989—20 years ago this month—crowds of elated Berliners poured through holes battered into the wall that for so long had divided their city. The youthful and nimble danced along the top of the wall, celebrating newly arrived freedom of movement in a miles-long street party that lasted into the night. The fall of the Berlin Wall was the evidence most visible in the West of a populist tsunami sweeping Eastern Europe.

The next day, the Foreign Minister of Bulgaria led reform-minded colleagues to promise free elections and summarily replace the repressive leadership of Todor Zhivkov. Eight days later, Czech police truncheoned student demonstrators in Prague, provoking massive strikes by enraged Czech citizens. Huge crowds paraded "Down with Communism" banners through Wenceslas Square, and on November 24, the Czech Communist Party leader and his Politburo resigned. Poland and Hungary had passed tipping points several months before. In Poland, decades of generally surreptitious Roman Catholic, nationalist and independent trade union resistance to communist rule burst into the open, and the political party Solidarity swept up 80 percent of the vote in parliamentary elections. In Hungary, change came from the top, with Communist Party officials authoring reform plans, establishing a stock exchange, nurturing foreign investment, encouraging entrepreneurial initiative, allowing freedom of expression and resigning themselves to an eventual multiparty system. In Romania, a raid by secret police on the Inner City Reform Church in Timişoara provoked protests, soon followed by street fighting. Army units changed sides, leading to savage conflicts with the dreaded security police. Communist dictator Nicolae Ceauşescu provided a rallying point for diehards until he was gunned down by a firing squad on Christmas Day. Like most seminal events, the razing of the Berlin Wall was at once a culmination, a watershed and a precondition.

The collapse of communism in Eastern Europe represented the culmination of the Cold War. For two generations, American soldiers, sailors, airmen, marines and U.S. allies secured a vast arc sweeping from Norway through Germany, around the southern rim of Eurasia and across divided Korea into the Bering Straits. Occasionally this mission went "hot" and sent Americans into battle; more often it required constant vigilance and the tedium of sustained preparation. Containment theory held that if communist aggression could be deterred long enough, communism's moribund economic system would disintegrate from its own inefficiencies, regimes would mellow and restive subject peoples would throw off tyranny.

Patience and determination proved to be virtues. Behind the shield afforded by Allied forces, nations on the American side of the *limes* experienced unprecedented prosperity and economic growth in an atmosphere of political and personal freedoms. On the communist side, stagnation threatened collapse. Reformers such as Mikhail Gorbachev sought to salvage the system through restructuring and greater openness. Once reform was under way, however, its momentum proved impossible to control. Communist governance was swept away rather than salvaged. The Soviet Union itself collapsed into 15 successor states, many of which followed up with legitimate elections. This was a great time to be an American soldier in Germany—Germans you had never met paid for your gas at a filling station or for your beer at a *Gasthaus*, and thanked you for sacrifices you had made on behalf of their country.

The world after the communist collapse was very different from the world before. Most notably, the potential for World War III—a nuclear holocaust wherein two superpowers fought to the death around the globe—became increasingly unlikely. As the bipolar world broke down, repressed



DoD/SSG E. Lee Cockran

Visitors leave East German police behind at a newly created opening in the Berlin Wall at Potsdamer Platz on November 14, 1989. The wall "fell" on November 9, 20 years ago; a short section remains standing at Potsdamer Platz.

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A crowd celebrates atop the Berlin Wall following the official opening of the Brandenburg Gate to traffic on December 22, 1989. More than 100,000 people attended the reopening of the city landmark, closed since building of the wall commenced on August 13, 1961.

ethnic tensions, failed states, rogue nations and terrorism provided continuing security challenges, but the stakes were never as high. Only the Soviet Union (and then Russia) had been realistically capable of exterminating the United States as a nation.

The good news for the American people was reduced defense expenditures. The bad news for the Army was that it became busier than ever, with fewer resources. More than a half-million service personnel and their dependents returned from Europe, massive overseas basing dwindled to a shadow of its former self, and the radically downsized Army assumed an expeditionary posture. Escalating deployments such as those to Somalia, Haiti and the Balkans proved to be rehearsals for massive deployments to Iraq. The forward deployment of the Cold War morphed into the recurrent deployments of the global war on terrorism. Massive Cold War force structure morphed into nimbler and more easily rotated brigade-based forces. The battle rhythm of force-generation cycles replaced the detailed rigor of general deployment plans. The Army of 2009 is very different in its outlook and capabilities from that of 1989, even if technological advances are not taken into account.

The collapse of communism was a precondition for a more democratic, prosperous and integrated Europe, but it provided no guarantee. False dawns after both World Wars I and II disintegrated into international strife, ethnic chaos, the persecution of minorities, repression and tyranny. Eastern Europe in 1989 was no more immune to regression than Germany, Italy or France had been after World War II—albeit for somewhat different reasons. The United States, NATO allies and the European Union initiated local variations on the Marshall Plan to assist in invigorating and integrating the newly liberated nations. Our Army contributed significantly through Partnership for Peace (PfP) and related initiatives to downsize, modernize and integrate former Warsaw Pact military establishments. If democracy were to thrive, these bureaucratic behemoths had to be right-sized and brought under parliamentary control. Military cooperation (and later integration) with the West required restructuring, reequipping, retraining and mutual experience. These were achieved within the framework of PfP, and collaterally during combined operations in the Balkans. Membership in NATO or the European Union was not granted—it was earned. By 1999, Poland, Hungary and the Czech Republic had sufficiently advanced political, economic and military reforms to be accepted into NATO. Others would follow. The dream pursued since the Atlantic Charter of 1941 of a Europe that is prosperous, peaceful and free has had such high points as the Normandy landings, the establishment of NATO and the fall of the Berlin Wall, but a lot of follow-up work has been necessary to consolidate the success of the high points.

From the perspective of 20 years, remembrance of the fall of the Berlin Wall still evokes profound emotions among those who served for so many years along the inter-German border. At the time, it seemed a moment of unbridled triumph, a giant step forward in the favor of freedom-loving peoples. History has marched on, and we now have new adversaries and problems to distract us. Nevertheless, the world is a better place for the events of 1989. The patience and determination that brought us the success they represent may enable us to overcome present and future challenges as well. ★

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: Army Transformation 1989–2005, *is forthcoming.*

Recommended Reading:

Echikson, William, *Lighting the Night: Revolution in Eastern Europe* (New York: William Morrow and Company, 1990)

Lindley-French, Julian, *The North Atlantic Treaty Organization: The Enduring Alliance* (London: Routledge, 2006)

NATO Handbook (Brussels: NATO Office of Information and Press, 2004)



PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

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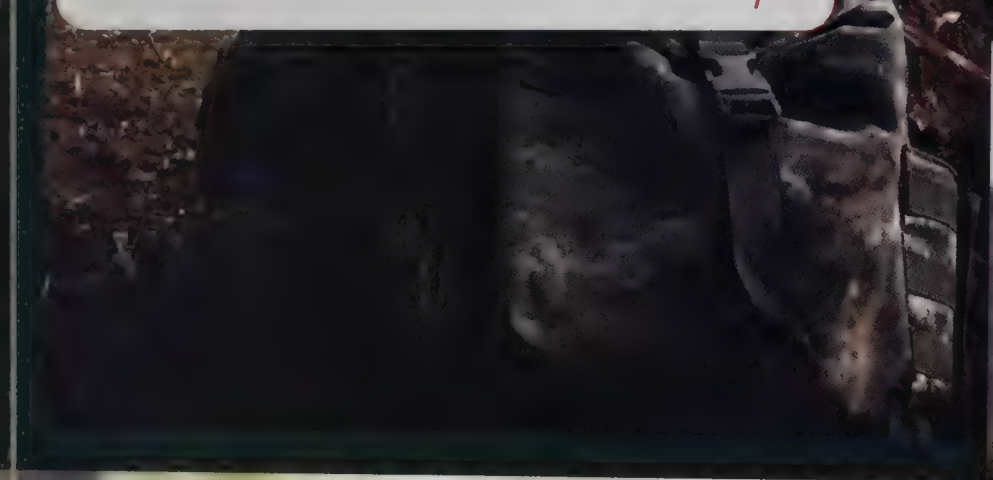
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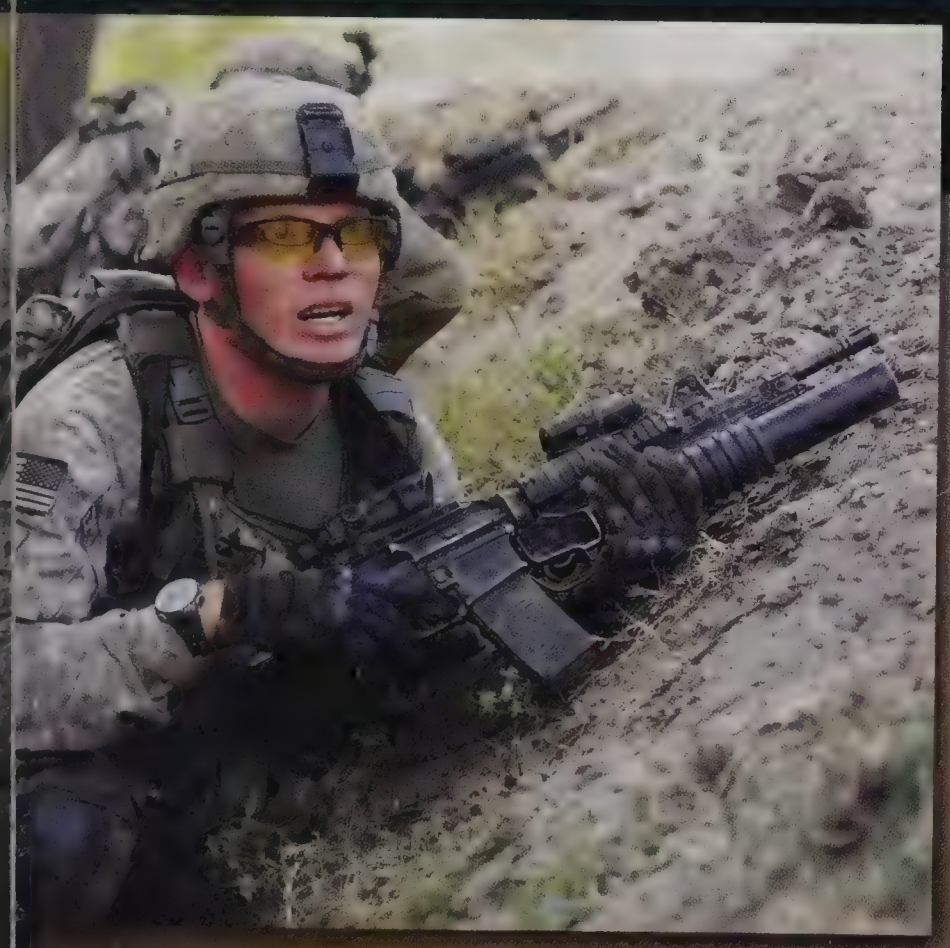
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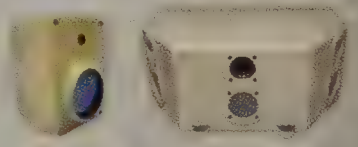
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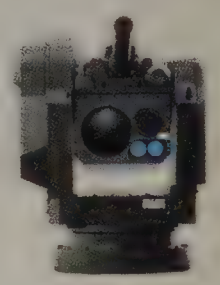
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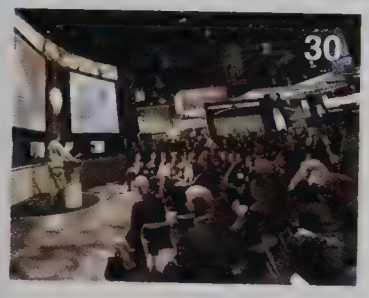
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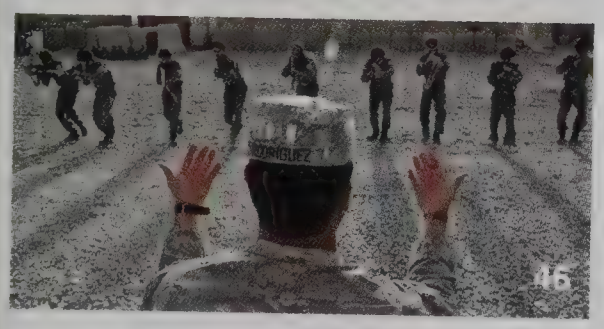
Leadership Beyond the Chain of Command *By LTG James M. Dubik, USA Ret.* ***Page 16***
Shifting a Command Burden Back Where It Belongs *By Richard Hart Sinnreich* ***Page 18***
Afghanistan and Vietnam *By GEN Frederick J. Kroesen, USA Ret.* ***Page 20***
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Bees and Spiders: Seeing the World from Different Perspectives *By LTC Brian L. Steed* ***Page 24***
AUSA Trustee Hudson Named CEO of BAE Systems ***Page 25***
Confronting an Unhappy and Ominous Precedent *By Richard Hart Sinnreich* ***Page 27***

FEATURES















The 2009 AUSA Annual Meeting and Exposition: A Professional Development Forum
By Dennis Steele
In this Year of the NCO, the AUSA Annual Meeting offered forums, presentations and myriad Army and industry exhibits. Among the highlights were the keynote address by Secretary of Defense Robert M. Gates, briefings by Central Command commander GEN David H. Petraeus and Army Chief of Staff GEN George W. Casey Jr., and the presentation of the 2009 George Catlett Marshall Medal to Kenneth Fisher, CEO of the Fisher House Foundation. ***Page 30***

Keynote Address, AUSA Annual Meeting: DoD and the U.S. Army
By Secretary of Defense Robert M. Gates
The full text of Secretary Gates' speech. ***Page 35***

The Battlefield Surveillance Brigade in Iraq
By COL Robert P. Walters Jr. and LTC Daniel E. Soller
The 504th Battlefield Surveillance Brigade (BfSB), the second of 10 BfSBs to be fielded by the Army, provided versatile support in the form of intelligence, surveillance and reconnaissance (ISR) for commanders and ISR teams during its Iraq deployment. ***Page 40***

Army Professional Military Leader Development *By MAJ Robert L. Green*
To prepare leaders for the complex operations in the current operating environment, the author says the Army needs to develop a new course of study that promotes "a broader understanding of military history, politics, culture, religion and governance." ***Page 46***

Marshall's Men *By COL Cole C. Kingseed, USA Ret.*
Through his oversight of officers' promotions and commitment to service, Army Chief of Staff GEN George C. Marshall modernized the Army as he developed a cadre of dynamic commanders. ***Page 50***

The USA/USMC Counterinsurgency Center: Preparing the Force for Counterinsurgency, Stability Operations and Security Force Assistance
By COL Daniel S. Roper
Counterinsurgency (COIN) in the U.S. military is not new, but the U.S. Army/U.S. Marine Corps Counterinsurgency Center at Fort Leavenworth, Kan., is fostering a new and balanced approach to COIN, stability and security force operations. ***Page 61***

CompanyCommand—Building Combat-Ready Teams: Lessons from Task Force Currahee
Company commanders from 4th Brigade, 101st Airborne Division (Air Assault), discuss lessons learned and insights gained while serving in six provinces of eastern Afghanistan from March 2008 to March 2009. ***Page 63***

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In Memoriam



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President Barack Obama speaks at the November 10 Fort Hood, Texas, memorial service honoring the victims of the November 5 shooting rampage that left 13 dead and 38 wounded.

The news from Fort Hood, Texas, shocks and saddens all of us. Our thoughts and prayers are with the wounded and the families of those who were killed in this horrifying shooting.

At the memorial service held at Fort Hood on November 10, Chief of Staff of the Army GEN George W. Casey Jr. said, "The Army and Fort Hood are no strangers to pain and tragedy and loss. As many of us know personally and all too well, that's been the case for the last eight years. But we are an Army that has drawn strength from that adversity. So as we grieve as an Army Family ... as we wrap our arms around the families of our fallen comrades, I would say to you all: 'Grieve with us ... don't grieve for us.' Those who have fallen did so in the service of their country ... they freely answered the call to serve ... and they gave their lives for something that they loved and believed in."

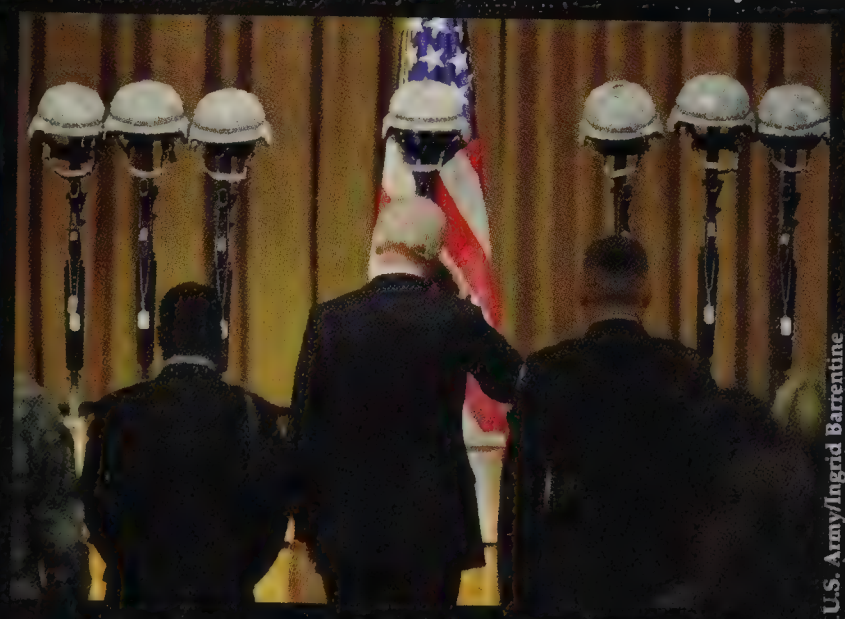
Speaking at the service, President Obama said, "For those families who have lost a loved one, no words can fill the void that's been left. We knew these men and women as soldiers and caregivers. You knew them as mothers and fathers; sons and daughters; sisters and brothers.

"But here is what you must also know: Your loved ones endure through the life of our nation. Their memory will be honored in the places they lived and by the people they touched. Their life's work is our security and the freedom that we all too often take for granted. Every evening that the sun sets on a tranquil town; every dawn that a flag is unfurled; every moment that an American enjoys life, liberty and the pursuit of happiness—that is their legacy."

The President continued: "It may be hard to comprehend the twisted logic that led to this tragedy. But this much we do know: No faith justifies these murderous and craven acts; no just and loving God looks upon them with favor. For what he has done, we know that the killer will be met with justice—in this world, and the next.

"Here, at Fort Hood," President Obama said, "we pay tribute to 13 men and women who were not able to escape the horror of war, even in the comfort of home. Later today, at Fort Lewis, one community will gather to remember so many in one Stryker Brigade who have fallen in Afghanistan. Long after they are laid to rest—when the fighting has finished, and our nation has endured; when today's servicemen and women are veterans, and their children have grown—it will be said that this generation believed under the most trying of tests; believed in perseverance—not just when it was easy, but when it was hard—that they paid the price and bore the burden to secure this nation, and stood up for the values that live in the hearts of all free peoples."

We send our condolences, and we will do everything we can to support our soldiers and their families in these extraordinarily difficult times. ★



U.S. Army/Ingrid Barrentine

Vice President Joe Biden salutes seven soldiers who were memorialized during a ceremony at Fort Lewis, Wash., November 10.

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• Budget	(800) 455-2848	• National	(800) Car-Rent
• Alamo	(800) 354-2322 *(rental for under age 25 available)*		

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ARMY Magazine Award Winners

ARMY Magazine congratulates MAJ Eric N. Atkisson and "CompanyCommand," winners of the 2009 ContentWise Magnum Opus "Silver" Awards for Outstanding Achievement in Custom Media.

MAJ Atkisson was honored in the category of Best Feature Article, Print Magazine, for his article "Recollections of Italy, 65 Years Later," which appeared in the November 2008 issue of ARMY Magazine.

"CompanyCommand" was honored in the category of Best Regularly Featured Department, Section or Column, Print Magazine, for "Leading Our Soldiers After They Lose One of Their Own" in the January 2008 issue.

The ContentWise Magnum Opus Awards are an international competition "recognizing excellence in editorial, design and strategy for organizations using print and online publications as well as social media in their content marketing efforts." The competition is judged by leading industry professionals and faculty of the University of Missouri School of Journalism.

This Month's Cover

Soldiers from U.S. Army Company C, 2nd Battalion, 12th Infantry Regiment, 4th Brigade Combat Team, 4th Infantry Division, do battle in the Waterpur Valley of Kunar Province, Afghanistan, in November. Clockwise from top: Bombs explode on insurgent fighting positions in the Waterpur Valley. PFC Chris Johnson watches as U.S. Army helicopters fire rockets at insurgents in the hills surrounding the valley. A UH-60 Black Hawk helicopter drops ammunition and water to U.S. Army soldiers following a three-hour battle. SPC Thomas Upton watches for anti-Afghan forces during a gun battle. This month's issue touches upon various aspects of the war in Afghanistan. *(Cover photographs: U.S. Army/SGT Matthew Moeller)*

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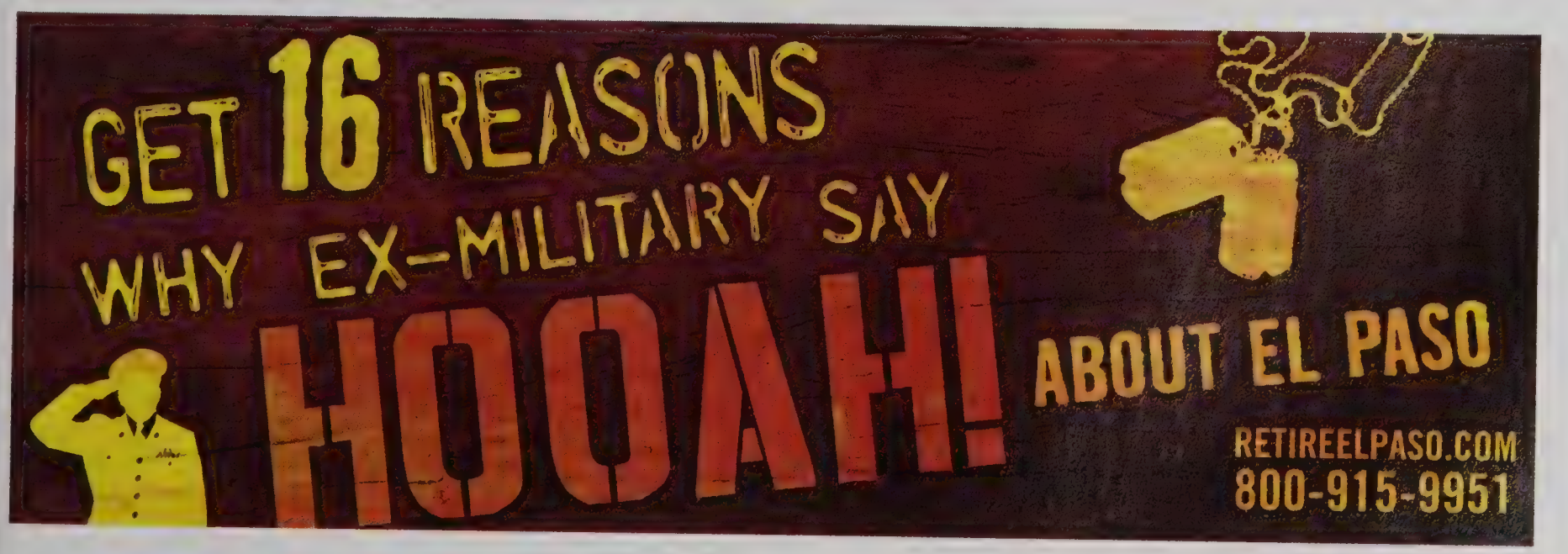
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Washington Report

President Obama Signs Defense Authorization Bill

President Barack Obama signed the fiscal year (FY) 2010 National Defense Authorization Act at a ceremony at the White House in late October. The $680.2 billion bill includes a 3.4 percent pay raise for all servicemembers, 0.5 percent above the budget request. It also authorizes a temporary increase of 30,000 soldiers for the Army and approves $130 billion to conduct the wars in Iraq and Afghanistan. Noting that the legislation is a watershed in targeting wasteful defense spending, President Obama said, "This bill provides for the best military in the history of the world."

The bill also:

- Provides $6.7 billion for thousands of mine resistant ambush protected all-terrain vehicles being deployed to Afghanistan.
- Expands TRICARE coverage to reserve component members and their families for 180 days before mobilization.
- Prohibits fee increases during FY 2010 on TRICARE inpatient care.
- Provides $2.2 billion for family-housing programs.
- Provides travel and transportation for three designated people, including non-family members, to visit hospitalized servicemembers.
- Allows seriously injured servicemembers to use a non-medical attendant for help with daily living or during travel for medical treatment.
- Adds $600 million to address equipment shortfalls in the reserve components.
- Makes it easier for deployed soldiers to vote by requiring all states to provide overseas voters with the option of receiving ballots electronically and no later than 45 days before the election, barring states from rejecting military ballots that have not been notarized and requiring DoD to include voter-registration and absentee-ballot request information at every military base.

Advance Funding for VA. President Obama signed into law in October a bill that provides at least one year of advance funding for basic VA medical programs in future fiscal years.

The new legislation, passed through Congress with near-unanimous support, will avoid any funding gaps caused by budget delays in Congress, which has been late passing a budget bill 20 times in the last 23 years.

Under the Veterans Health Care Budget Reform and Transparency Act, Congress will be allowed to approve funds for the VA's medical account two years in advance. To ensure that enough money is provided, the VA must provide an estimate that will be made available to the public.

In signing the bill, President Obama said, "It ensures that veterans' health care will no longer be held hostage to the annual budget battles in Washington."

Congress is currently considering a $133 billion VA budget for fiscal year (FY) 2010, including another $48 billion in advance funds for 2011.

Agent Orange. Veterans Affairs Secretary GEN Eric K. Shinseki, U.S. Army retired, recently added B-cell leukemias, Parkinson's disease and ischemic heart disease to the list of Vietnam War veterans' illnesses presumed to be caused by exposure to the defoliant known as Agent Orange. Official recognition of a link between the herbicide (named for the orange-colored barrels in which it was stored) and the illnesses means that veterans will no longer have to prove a connection between their sickness and their military service when filing a health-benefits claim.

GEN Shinseki made the decision based on a study by the National Academy of Science's Institute of Medicine that indicates a strong connection between the illnesses and exposure to Agent Orange, a specific blend of herbicides used in Vietnam from 1962 to 1971. The additions raise to 15 the number of sicknesses presumed to be linked to Agent Orange, among them prostate cancer, Hodgkin's disease, multiple myeloma and Type 2 diabetes.

The new ruling must be published in the *Federal Register* and opened for final comment before it takes effect. The VA estimates that the process will be completed early in 2010. For more information, call the toll-free helpline at 1-800-749-8387 or visit http://www.publichealth.va.gov/exposures/agentorange/.

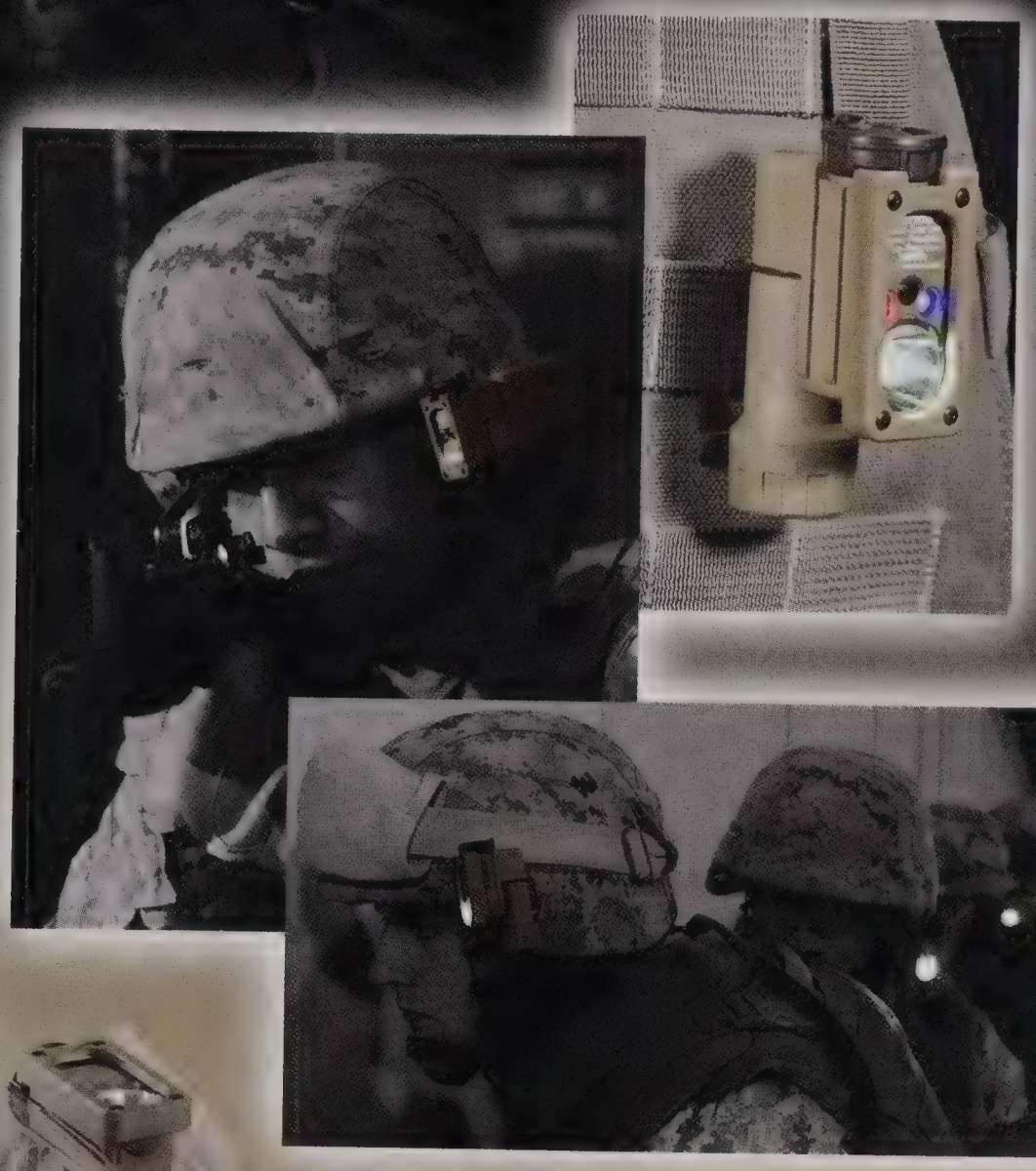
Spouse Residency Bill. Congress passed a bill in November that will improve the legal residency status of military spouses. The Military Spouse Residency Relief Act was signed by President Obama on November 11.

For decades, servicemembers have had the option to claim their original residency when they relocated; spouses did not have the same option, and many families had split residencies.

Under the new bill, for voting and tax purposes, military spouses will be able to claim residency in the same state as their active duty husbands or wives, regardless of where they are stationed.

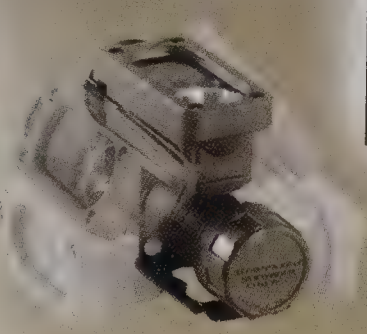
Spouses lobbied for the new law, which they say will ease the hardships imposed by frequent relocations—usually every three years—including having to obtain a new driver's license or reregister to vote. In some cases, the legislation may lower the income taxes some spouses pay and eliminate the need for couples to file separate tax returns.

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News Call

IEDs Raise Army Death Toll in Afghanistan

The roadside bombs known as improvised explosive devices (IEDs) are the major cause of troop deaths in Afghanistan, where they are increasing in power and effectiveness. October was the deadliest month for U.S. troops there since the campaign began in 2001. Despite additional intelligence, surveillance and reconnaissance capabilities requested by Defense Secretary Robert Gates, there has been a dramatic rise in the number of soldiers killed or wounded by IEDs.

Part of the reason for the increase is that the number of U.S. troops in Afghanistan is at an all-time high, and they are conducting more operations than ever before. LTG Thomas F. Metz, director of the Joint Improvised Explosive Device Defeat Organization, told Congress another reason for the increase is that although it was initially slower to develop in Afghanistan than in Iraq, "the IED has now replaced direct-fire weapons as the enemy's weapon of choice" and the insurgents there "use IEDs in combination with conventional direct- and indirect-fire weapons as part of complex attacks."

On October 27, eight soldiers, all of them with the 5th Stryker Brigade Combat Team, 2nd Infantry Division, died when attacked by insurgents in the Arghandab Valley of Kandahar Province. Seven of them died when their Stryker was hit by a 1,000-pound fertilizer bomb. According to DoD, unlike the enemy in Iraq who used high-tech devices in sophisticated attacks, insurgents in Afghanistan are massing together fertilizer and other homemade bomb-making devices into cheap and simple—but powerful—IEDs.

DoD is searching for ways to counter the rising threat. The first lighter-weight mine resistant ambush protected all-terrain vehicle (M-ATV), designed to navigate Afghanistan's rugged terrain, arrived in October. Production is now being ramped up from 46 M-ATVs a month in July, and the factory expects to produce more than 1,000 of the vehicles each month by the end of the year. Another counter-IED effort is the implementation of an ammonium nitrate buy-back program, particularly in Regional Command South, which contains the restive provinces of Helmand, Kandahar and Zabul. Farmers and others who have large quantities of the fertilizer receive cash to buy a less deadly alternative.

Iraq Drawdown on Schedule. After weeks of debate that threatened the planned withdrawal of U.S. combat troops, Iraqi lawmakers in November finally agreed on terms for national elections scheduled for January.

GEN Raymond T. Odierno, commander of Multi-National Force-Iraq, announced in October that he plans to keep the number of troops currently in Iraq—about 117,000—steady for about two months after the elections to ensure security during the transition of government. To that end, he requested an extension of approximately three weeks in the deployment of the 1st Cavalry Division Headquarters in Baghdad.

The Iraqi parliament's deadlock over how to register voters in the oil-rich northern province of Kirkuk potentially hampered the U.S. pledge to end all U.S. combat operations by August 31, 2010, and withdraw all of its troops by the end of 2011.

The election, originally slated for January 16, was tentatively rescheduled for January 21. GEN Odierno and the American ambassador to Iraq, Christopher R. Hill, released a joint statement praising the passage of the elections law and encouraging all Iraqis to vote.

Terrorist attacks in Baghdad in late October and early November contributed to the security challenge in Iraq. Suicide bombings at the Justice Ministry and the Baghdad provincial council buildings—in a heavily protected section of the capital—killed 155 people and wounded more than 500. The vehicles containing the bombs had passed multiple security checkpoints to reach their targets. Iraqi authorities arrested dozens of police officers and soldiers responsible for security in the area and were investigating when ARMY Magazine went to press.

The U.S. military in Iraq is concerned that such attacks may increase as the election nears. Large-scale violence could incite sectarian strife and undermine the government of Iraq. The drawdown, however, is now on schedule, and the January deployment to Iraq of the 1st Brigade Combat Team, 10th Mountain Division, has been cancelled.

Deployments. DoD has announced that the following units will deploy to Afghanistan as part of upcoming rotations of forces.

Operation Enduring Freedom

- 101st Combat Aviation Brigade, Fort Campbell, Ky., will deploy with approximately 2,800 soldiers in the spring of 2010.
- 1st Brigade Combat Team (BCT), 101st Airborne Division, Fort Campbell, will deploy with approximately 3,700 soldiers next spring and summer.
- 2nd Stryker Cavalry Regiment, Vilseck, Germany, will deploy next spring and summer with approximately 4,000 soldiers.
- 1st BCT, 4th Infantry Division, Fort Carson, Colo., will deploy with approximately 3,300 soldiers next summer to continue training and mentoring Afghan national security forces.
- 2nd BCT, 34th Infantry Division, Iowa National Guard, with approximately 3,500 personnel, will begin deploying in the fall of 2010 to continue ongoing operations and training of Afghan national security forces.

* * *

The following units, totaling approximately 15,000 personnel, will deploy to Iraq in summer 2010 as part of


THE DIFFERENCE IS SEEING
WHAT'S ON ROOFTOPS.

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from October 1 to October 31, 2009. All names have been released through the Department of Defense; families have been notified.

SGT Ryan C. Adams, 26
PFC Brian R. Bates Jr., 20
SSG Keith R. Bishop, 28
SPC George W. Cauley, 24
SPC Robert K. Charlton, 22
SGT Josue E. Hernandez Chavez, 23
SPC Kyle A. Coumas, 22
SPC Michael A. Dahl Jr., 23
SGT Fernando Delarosa, 24
SPC Jesus O. Flores Jr., 28
SSG Alex French IV, 31
SGT Justin T. Gallegos, 27
SSG Luis M. Gonzalez, 27
SPC Anthony G. Green, 28
SPC Christopher T. Griffin, 24
SGT Dale R. Griffin, 29
PFC Kimble A. Han, 30
SGT Joshua M. Hardt, 24
SPC Russell S. Hercules Jr., 22
SPC Kevin O. Hill, 23
SGT Issac B. Jackson, 27
SGT Joshua J. Kirk, 30
SPC Daniel C. Lawson, 33
SPC Eric N. Lembke, 25
CWO Niall Lyons, 40
SPC Stephan L. Mace, 21
SSG Jack M. Martin III, 26
SSG Vernon W. Martin, 25
SSG Shawn H. McNabb, 24
SFC David E. Metzger, 32
PFC Devin J. Michel, 19
CWO Michael P. Montgomery, 36
SGT Nikolas A. Mueller, 26
PFC Alan H. Newton Jr., 26
PFC Brandon A. Owens, 21
SGT Thomas D. Rabjohn, 39
SGT Christopher M. Rudzinski, 28
SGT Roberto D. Sanchez, 24
SGT Michael P. Scusa, 22
CPT Benjamin A. Sklaver, 32
SFC Christopher D. Shaw, 37
SGT Aaron M. Smith, 25
SSG Chris N. Staats, 32
SPC Jared D. Stanker, 22
SPC Brandon K. Steffey, 23
SSG Glen H. Stivison Jr., 34
PFC Brandon M. Styer, 19
PFC Kevin C. Thomson, 22
PFC Christopher I. Walz, 25
SFC Kenneth W. Westbrook, 41
SGT Patrick O. Williamson, 24
SGT Eduviges G. Wolf, 24

Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation Iraqi Freedom from October 1 to October 31, 2009. All names have been released through the Department of Defense; families have been notified.

SPC Paul E. Andersen, 49
MAJ David L. Audo, 35
SSG Bradley Espinoza, 26
SPC Joseph L. Gallegos, 39
MAJ Tad T. Hervas, 48
PFC Daniel J. Rivera, 22
SPC Ross E. Vogel III, 27

annual troop rotations and will serve as advise-and-assist brigades.

Operation Iraqi Freedom

- 4th Infantry BCT, 3rd Infantry Division, Fort Stewart, Ga.
- 2nd BCT, 25th Infantry Division, Wahiawa, Hawaii.
- 3rd Armored Cavalry Regiment, Fort Hood, Texas.
- 4th BCT, 1st Cavalry Division, Fort Hood.

In addition, at the request of GEN Raymond T. Odierno, commander of Multi-National Force-Iraq, the deployment of the 1st Cavalry Division Headquarters will be extended for up to an additional 23 days; some 1,000 soldiers of the headquarters in Baghdad will stay to ensure key capabilities are maintained during the weeks following the national elections slated for January.

Stryker Update. The Army plans to convert two of its heavy brigade combat teams (HBCTs) to brigades built around the light, fast, versatile Stryker wheeled vehicles. DoD recently ordered more. The 1st HBCT, 1st Armored Division, will convert to a Stryker brigade when it returns from Iraq in late 2010. The 3rd Armored Cavalry Regiment is scheduled to switch the following summer, after its scheduled deployment to Iraq. Each conversion will take approximately two years to reach full operational capacity. Stryker brigades generally have about 300 of the eight-wheeled vehicles in several different versions. Each Stryker carries nine infantrymen and can travel at 60 miles per hour.

The U.S. Army Tank-automotive and Armaments Life Cycle Management Command recently awarded a $647 million contract for 352 Strykers to General Dynamics. The purchase includes various versions of the Stryker, including infantry carrier vehicles, anti-tank guided-missile vehicles, engineer squad Strykers, mortar carriers, command vehicles, reconnaissance vehicles, and nuclear, biological and chemical reconnaissance vehicles.

Since 2003, when the first Stryker unit deployed to Iraq, the vehicles have been painted deep green. When the 5th Stryker Brigade, Fort Lewis, Wash., deployed to Afghanistan several months ago, the first Stryker BCT to do so, the vehicles were standard green, and they will continue to be produced in that color. The Army recently announced, however, that as the vehicles are sent to authorized facilities for repair and retrofit, they will be repainted desert tan to fit in better with the surrounding terrain.

Army Recruiting. The active Army achieved its fourth consecutive year of recruiting success in fiscal year (FY) 2009, with 70,045 accessions—8 percent above its goal. The Army National Guard had approximately 56,000 accessions, making 100 percent of its goal, and the Army Reserve had more than 36,000, 5 percent above its goal.

According to DoD, the recruits exceeded standards in all three components. The Army—and DoD—standard is that 90 percent of recruits have high school diplomas (or the equivalent) and 60 percent score average or above on the military aptitude test. About 95 percent of the active Army's 2009 recruits had high school diplomas, the highest figure since 1996 and


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GENERAL OFFICER CHANGES*



GEN K.B. Alexander from Dir., NSA/Chief, CSS, Fort Meade, Md., to Dir., NSA/Chief, CSS/Cmdr., CYBERCOM, Fort Meade.



LTG W.B. Caldwell IV from CG, CAC and Fort Leavenworth, Fort Leavenworth, Kan., to Cmdr., CSTC-A/Cmdr., NTM-A, Afghanistan.



LTG R.P. Formica from CSTC-A, CENTCOM, OEF, Afghanistan, to CG, SMDC/ARSTRAT.



LTG K.M. Huber from CG, USARSO, Fort Sam Houston, Texas, to Dep. Cmdr., USJFCOM, Norfolk, Va.



LTG M.L. Oates from CG, 10th Mountain Division (Light) and Fort Drum, Fort Drum, N.Y., to Dir., JIEDDO, Arlington, Va.



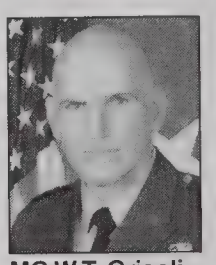
LTG W.N. Phillips from Cmdr., JCC, MNF-I, OIF, Iraq, to Mil. Dep./Dir., AAC, OASA (ALT), Washington, D.C.



LTG D.M. Rodriguez from Dep. Cmdr., USF-A, Afghanistan, to Cmdr., IJC, Afghanistan.



LTG G.C. Swan III from CoS, MNF-I, OIF, to CG, USARNORTH/Fifth U.S. Army, Fort Sam Houston.



MG W.T. Grisoli from Dir., Program Analysis and Evaluation, ODCS, G-8, Washington, D.C., to Dep. CG for Civil and Emergency Ops., USACE, Washington, D.C.



MG N.G. Justice from PEO, C3T, APG, Md., to CG, RDECOM, APG.



MG M.W.B. Temple from Dep. CG for Civil and Emergency Ops., USACE, Washington, D.C., to Dep. Chief of Engineers/Dep. CG, USACE, Washington, D.C.

Brigadier Generals: **W.L. Davis** from Dir., Army Aviation, ODCS, G-3/5/7, Washington, D.C., to Dep. Dir./CoS, ARCIC, TRADOC, Fort Monroe, Va.; **W.M. Golden Jr.** from Asst. Div. Cmdr. (M), 2nd ID, Eighth U.S. Army, Korea, to Dir., J-1, The Jt. Staff, Washington, D.C.; **A.R. Ierardi** from Dep. Cmdr. for Programs, CSTC-A, OEF to Dir., Joint and Futures, ODCS, G-8, Washington, D.C.; **J.E. Martz** from Dep. Dir./CoS, ARCIC, TRADOC, Fort Monroe to Dir., Program Analysis and Evaluation, ODCS, G-8, Washington, D.C; **C.M. Nichols** from CG, ECC, Fort Belvoir, Va., to CG, JCC, MNF-I, OIF; **G.S. Patton** from Dir, J-1, The Jt. Staff to Dep. Cmdr. for Programs, CSTC-A, OEF; **G.C. Potter** from Dir. Intel., J-2, EUCOM, Germany, to Vice Dir. for Intel, J-2, The Jt. Staff, DIA, Washington, D.C.; **N.L.S Price** from Dep. PEO, Integration, APG to PEO, C3T, APG; **K.J. Stein** from Dir., CJ-1/4/8, MNF-I, OIF to CG, TACOM LCMC, Warren, Mich.

■ ***AAC**—Army Acquisition Corps; **APG**—Aberdeen Proving Ground; **ARCIC**—Army Capabilities Integration Center; **ARSTRAT**—U.S. Army Forces Strategic Command; **CAC**—U.S. Army Combined Arms Center; **CENTCOM**—U.S. Central Command; **CSS**—Central Security Service; **CSTC-A**—Combined Security Transition Command-Afghanistan; **C3T**—Command, Control and Communications (Tactical); **CYBERCOM**—U.S. Cyber Command; **DIA**—Defense Intelligence Agency; **ECC**—Expeditionary Contracting Command; **EUCOM**—U.S. European Command; **IJC**—International Security Assistance Force Joint Command; **JCC**—Joint Contracting Command; **JIEDDO**—Joint Improvised Explosive Device Defeat Organization; **MNF-I**—Multi-National Force-Iraq; **NSA**—National Security Agency; **NTM-A**—North Atlantic Treaty Organization Training Mission-Afghanistan; **OASA (ALT)**—Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology); **ODCS**—Office of the Deputy Chief of Staff; **OEF**—Operation Enduring Freedom; **OIF**—Operation Iraqi Freedom; **PEO**—Program Executive Officer; **RDECOM**—U.S. Army Research, Development and Engineering Command; **SMDC**—U.S. Army Space and Missile Defense Command; **TACOM LCMC**—Tank-automotive and Armaments Life Cycle Management Command; **TPU**—Troop Program Unit; **TRADOC**—U.S. Army Training and Doctrine Command; **USACE**—U.S. Army Corps of Engineers; **USARNORTH**—U.S. Army North; **USARSO**—U.S. Army South; **USF-A**—U.S. Forces-Afghanistan; **USJFCOM**—U.S. Joint Forces Command.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

up from 84 percent in FY 2008.

Bill Carr, deputy under secretary of defense for military personnel policy, noted several factors working in the Army's favor, including pay, especially adjustments in pay for senior NCOs, and the effects of the recession on civilian employment. The military spends about $10,000 in recruiter time, advertising and other costs to sign each recruit.

Recruiting for FY 2010 has started strong. By mid-October, more than 30,000 people were already in the pool of enlistees slated to begin basic training in upcoming months.

Writing Contest Winner. COL Bruce D. Caulkins has been selected as the winner of the 2009 writing contest cosponsored by AUSA's Institute of Land Warfare (ILW) and U.S. Army Training and Doctrine Command's (TRADOC) Army Capabilities Integration Center. He was awarded a prize of $1,000 in a Pentagon ceremony in September. The check was presented by LTG Theodore G. Stroup Jr., U.S. Army retired (AUSA's vice president, Education/executive director, Institute of Land Warfare), and LTG Michael A. Vane (TRADOC's deputy commanding general, Futures/director, Army Capabilities Integration Center).

The contest theme was "Capabilities Needed for the Army Future Force, 2030 and Beyond." COL Caulkins' winning entry, "Proactive Self-Defense in Cyberspace," discusses the security vulnerabilities of web sites and computer networks, and how they have been and can be exploited; it also recommends solutions that the Department of Defense can implement to protect itself against cyber attacks. COL Caulkins currently serves as the commandant for the Leader College

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COMMAND SERGEANTS MAJOR CHANGES*

Photograph Unavailable

CSM T.L. Brown from U.S. Army FMS, Fort Jackson, S.C., to U.S. Army SSI, Fort Jackson.



CSM O.N. Cuffee from U.S. Army TACOM LCMC to DLA, Fort Belvoir, Va.



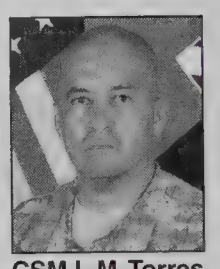
CSM D.G. Manley from 9th Signal Command, Fort Gordon, Ga., to Chief Information Office G-6, Pentagon, Washington, D.C.

Photograph Unavailable

CSM J.E. Roddick from NCO Academy, Fort Eustis, Va., to SDDC, Scott AFB, Ill.



CSM R.S. Rosen from USASMA, Fort Bliss, Texas, to Dep. Cmdt., USASMA, Fort Bliss.



CSM L.M. Torres from 4th Bde., 3rd ID, Fort Stewart, Ga., to FFID, Fort Bliss.

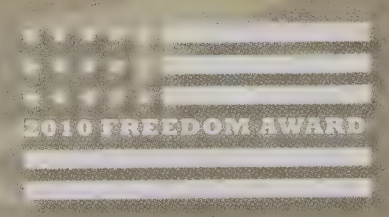
■ ***DLA**—Defense Logistics Agency; **FFID**—Future Force Integration Directorate; **FMS**—Financial Management School; **SDDC**—U.S. Military Surface Deployment and Distribution Command; **SSI**—Soldier Support Institute; **TACOM LCMC**—Tank-automotive and Armaments Life Cycle Management Command; **USASMA**—U.S. Army Sergeants Major Academy.*

*Command sergeants major positions assigned to general officer commands.

for Information Technology at the U.S. Army Signal Center of Excellence, Fort Gordon, Ga.

The paper, published by ILW as Land Warfare Paper 72, was presented by the author at AUSA's Annual Meeting in October. It is available online at http://www.ausa.org/publications/ilw/ilw_pubs/LWP/Documents/ (click on Caulkins) and can also be ordered by phone (800-336-4570, ext. 630) or e-mail (ILWPublications@ausa.org).

Freedom Award Nominations. Nominations are ongoing for employers who provide outstanding support to their employees serving in the reserve components. The Secretary of Defense Employer Support Freedom Award, instituted in 1996, is the U.S. government's highest recognition of employers who provide exceptional support to military employees and their families. National Guard and Reserve soldiers and their families have until January 18, 2010, to submit nominations. For more information or to make a nomination, visit www.FreedomAward.mil. ★



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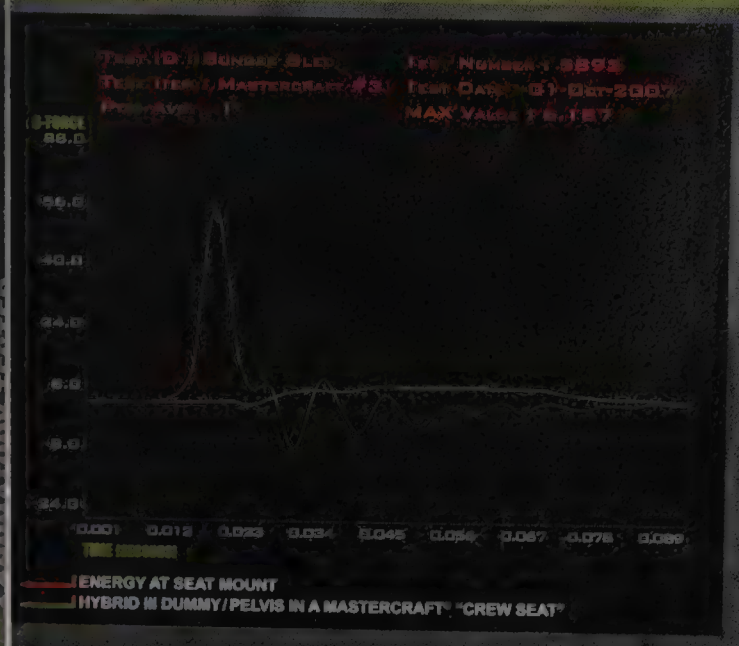
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Front & Center

Leadership Beyond the Chain of Command

By LTG James M. Dubik
U.S. Army retired

Leader teams are predicated on the prescription that every commander must operate not only within the intent of his immediate boss, but also his boss's boss—the Army's two-up/two-down approach. For a good portion of my career, understanding my chain of command and identifying on which leader teams I served was sufficient for me to execute my responsibilities. The nonhierarchical aspect of leadership was primarily the realm of senior leaders. That world has changed. Today junior leaders operate in a nonhierarchical leadership environment almost immediately. Our leadership doctrine is not fully capturing this reality.

As with many of my peers, nonhierarchical leadership did not become a reality for me until brigade command. When I commanded a brigade combat team (BCT) during the 1994 intervention in Haiti, I found that people outside my chain of command had a profound impact on the success of our brigade's mission: the governor of Northern Haiti; the mayors of Cap Haitien; Haitian religious, education and business leaders in our area of responsibility; U.S. government agencies and nongovernmental agencies; and other international organizations such as the international police monitors brought in to help retrain the local police. Yet none were part of my formal, hierarchical chain of command.

The second experience concerned an Army warfighting experiment. My brigade experimented with then-still-emerging digital technologies that ultimately became the Army Battle Command System. Over a period of many months, I observed then-MG John (Jay) W. Hendrix lead a very diverse set of civilian and military acquisition, test and evaluation, training and doctrine, experimentation, and defense industry organizations—few of which reported to him as part of his chain of command. Since he could give very few orders or directives in the classic military sense, he led by the power of persuasion, logic and common purpose. He orchestrated other professionals, adapting as the experiment unfolded.

These two experiences, when added to what I learned in my Senior Service College fellowship and as a special assistant to then-Chief of Staff of the Army GEN Gordon R. Sullivan, were pivotal in helping me understand that leadership space at the senior levels included two dimensions: one hierarchical, the other not. Whatever we call this second aspect of leadership—peer leadership, horizontal leadership, persuasive leadership, informal leadership—I found that it was as real and as important as our hierarchical chains of command.

Over the past 10 years we have seen that these two aspects of leadership are now essential, even at the junior levels. The professional-development experience of the current generation of leaders is much different from what my generation went through. Among the causes for this difference, two stand out. First, the very digital technologies with which I experimented in the mid-1990s now provide junior leaders access to information and services of organizations outside their chain of command, a capability that was just a concept a decade ago. Junior leaders have learned that this access and the relationships that develop from it can be hugely beneficial—or detrimental—to accomplishing their unit's mission. Second, the war highlighted and expanded the importance of nonhierarchical leadership at the junior-leader levels. Leading among tribal chiefs, religious leaders, governmental and nongovernmental agencies, and foreign military leaders is now a commonplace experience for our junior leaders. What I had to establish at the BCT level in Haiti is now demanded of our junior sergeants and officers in Iraq, Afghanistan and elsewhere.

The set of our Army's collaborative peer-learning networks and the Army's road-to-war training programs at home station and combat training centers have helped prepare junior leaders for this aspect of leadership. At first glance, the October 2006 version of Field Manual (FM) 6-22 *Army Leadership* appears to capture the actual experience of our leaders, but a closer inspection finds it lacking. We should not be surprised; during times of rapid change, experience often leads doctrine. For example, paragraph 3-48 states:

> Leaders at all levels recognize the Army is a team as well as a team of teams. These teams interact as numerous functional units, designed to perform necessary tasks and missions that in unison produce the collective effort of all Army components. Everyone belongs to a team, serving as either leader or responsible subordinate. For these teams to function at their best, leaders and followers must develop mutual trust and respect, recognize existing talents, and willingly contribute talents and abilities for the common good of the organization. Leadership within the teams that make up Army usually comes in two forms: Legitimate (formal) [and] Influential (informal).

In the next paragraph, the manual defines *legitimate* or *formal leadership* as leadership that is "granted to individuals by virtue of assignment to positions of responsibility and is a function of rank and experience." This definition seems accurate with respect to formal leadership, but not with respect to legitimacy. The kind of nonhierarchical leadership required of our

junior leaders appears as legitimate as that of the formal chain of command. In fact, those requiring nonhierarchical leadership of our junior leaders are the seniors in their chain of command.

Just a few paragraphs later, in paragraph 3-54, FM 6-22 declares that there are two "leader-team categories":

> ... horizontal and vertical. Horizontal leader teams can also be either formal (headquarters staffs, major commands) or informal (task forces, advisory boards). Vertical leader teams can be both formal (commanders and subordinates) and informal (members of a career field or functional area). Vertical leader teams often share a common background and function, such as intelligence analysis or logistical support. Vertical and horizontal teams provide structure to organize team training.

But *horizontal leadership*, as defined here, does not capture the nonhierarchical relationships that permeate our current leaders' experience. In paragraph 7-2, the manual acknowledges that leaders often must extend their influence beyond the chain of command, including "connecting with joint, allied and multinational partners as well as local nationals and civilian-led governmental or nongovernmental agencies. In this area, leaders often must operate without designated authority or while their authority is not recognized by others."

Paragraph 7-61 continues: "In today's politically and culturally charged operational environments, even direct leaders may work closely with joint, interagency and multinational forces, the media, local civilians, political leaders, police forces and nongovernmental agencies." Paragraphs 7-62 and -63 then go on to describe how leaders may have to build informal teams to accomplish organizational goals and use their influence to guide those teams, even when they have no formal authority. In fact, paragraph 7-63 states: "In some cases, [forming informal teams, even by direct leaders] may require leaders to establish their credentials and capability for leading others. At other times, leaders may need to interact as a persuasive force but not from an obvious position and attitude of power." Given all that Chapter 7 says about leading beyond the chain of command, one can conclude that this form of leadership is indeed legitimate, even if it is not formal. One gets the impression by the end of the manual that beyond-the-chain-of-command, nonhierarchical leader teams are a form of legitimate, informal, horizontal leadership.

That the 2006 version of *Army Leadership* extends its discussion of informal, nonhierarchical, beyond-the-chain-of-command leadership is a credit to the continual adaptability within our institution. The Army has done well in structuring training that aligns with actual junior-leader requirements at home station and at our combat training centers. We can improve, however, the cohesiveness and consistency of our doctrine and our description of the actual skills, knowledge and attributes that our junior



leaders need to lead or participate in nonhierarchical, beyond-the-chain-of-command leader teams. Leadership beyond the chain of command will never return to being primarily a senior-leader requirement. This form of leadership is not a passing requirement for junior leaders, necessary only now because of the kind of war we are fighting. Our networked environment as well as the conditions of current and future operations will continue to demand this kind of leadership of all Army leaders—junior and senior, military and civilian. Our institutional adaptation must therefore change the next version of FM 6-22 to reflect this as well as alter the model that guides postwar leader educational and developmental experiences. □

__LTG James M. Dubik__, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.

Shifting a Command Burden Back Where It Belongs

By Richard Hart Sinnreich

Some years ago, ARMY Magazine launched a feature entitled "Company Command," in which serving company commanders, typically captains, are invited to suggest and comment on issues affecting the performance of the Army's basic fighting formations. The feature has proved to be an illuminating window into the matters that most concern the leaders of the small units that bear the brunt of today's security and stabilization operations.

November's "Company Command" was especially pertinent to the continuing debate about the requirements for the success of such operations in Afghanistan and, more generally, to a less visible but ultimately more important debate within military circles concerning counterinsurgency doctrine.

A brief essay entitled "Zero KIAs as an Organizational Goal?" introduced the discussion. The author worries that senior leaders have begun to "prioritize zero KIAs [soldiers killed in action] ahead of mission accomplishment." Such guidance, he fears, "gives subordinate leaders and staff tacit permission to pull back from the fight" to avoid losing soldiers, risking mission failure.

The subsequent responses from other company commanders uniformly echoed his concern. Noted one caustically, "If staying alive is our #1 goal, then why deploy? We can maximize our likelihood of 'success' by staying at home with our families."

That this issue even has arisen reveals the dilemma that we've inflicted





In ARMY Magazine's *November "Company Command," leaders like CPT Jamey Gadoury reflected on the distinction between a "zero-killed-in-action" philosophy and the mission of defeating the enemy in battle.*

on our troops with a philosophy that increasingly has come to treat casualties—our own, those inflicted on "innocent civilians," and even, on occasion, the enemy's—not as the tragic but inescapable price of engaging in armed conflict, but instead as tacit evidence of its political and military mismanagement. One tries vainly to imagine how any war could be won in which such a perspective prevails, especially when it prevails on only one side.

Note that acknowledging this problem by no means ratifies the sort of casual indifference to casualties that marked such bloodbaths as World War I. Today's commanders are anything but callous about the lives of the soldiers entrusted to them. But the thoughtful responses to this month's "Company Command" topic strongly suggest that the young officers who submitted them have a much more realistic understanding of the challenge they currently face than do their superiors.

What they may or may not realize is the structural disconnection between the pressure they confront to avoid casualties and the counterinsurgency doctrine that they have been asked to execute. To quote one of that doctrine's more irrepressible critics, "Our soldiers are dying for a fad, not for a strategy. ... We enforce rules of engagement that kill our own troops to avoid alienating villagers who actively support the Taliban and celebrate our deaths."

Calling today's counterinsurgency doctrine a fad may be a bit excessive. But that it exposes our soldiers to the very increased casualties that their commanders apparently are being enjoined by their superiors to avoid scarcely can be doubted. In effect, unwilling to confront that dilemma themselves, senior political and military leaders simply have dumped it on their most junior commanders.

That's not the sort of leadership calculated to inspire those commanders' confidence. It's not the way to sustain their soldiers' loyalty and commitment. Above all, it's no way to win a war.

In a column written back in July, I noted the accumulating evidence that self-restraint in the use of force, a central premise of today's counterinsurgency doctrine, apparently wasn't producing the predicted result of diminishing the Taliban's sanctuary and support among key segments of the Afghan population. Since then, security conditions in Afghanistan have only deteriorated, while Coalition casualties have increased steeply.

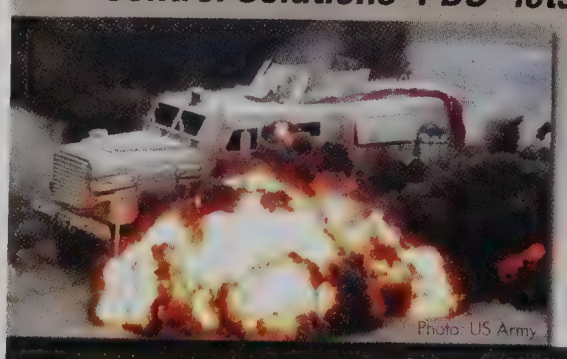
Taken together, those developments suggest strongly that the vital question that needs to be addressed by senior leaders is less how many more troops to invest in a war rapidly going south than how those soldiers should be employed, for what purposes and at what risk. Whatever strategy Mr. Obama and his commanders finally settle upon, on current evidence they need to rethink the balance between attempting to generate support from a people historically hostile to any foreign intruders and destroying the will of ruthless and determined enemies convinced, probably correctly, that, left alive, they can simply outlast us.

Either way, the burden of finding that balance, and of reconciling the mission to defeat the enemy with preserving the lives of the soldiers entrusted to their care, needs to be lifted from those least able to manage the dilemma successfully and handed back to their military superiors, who created it in the first place and continue today to impose it. □

***Richard Hart Sinnreich** writes regularly for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the November 1, 2009,* Lawton Constitution *and is reprinted by permission of the author.*

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Afghanistan and Vietnam

By GEN Frederick J. Kroesen
U.S. Army retired

The sudden spate of commentary that offers comparisons between the war in Afghanistan and the Vietnam War was apparently inevitable when GEN Stanley McChrystal's report to the President began leaking to the news media. My initial reaction was: Why Vietnam? Why not compare Afghanistan to Iraq, certainly a study which seems more relevant?

A less-than-scientific study of the content of these articles brought me to the conclusion that almost all of the authors oppose a surge of additional forces to Afghanistan, hence a comparison of today's war with one generally considered a loss (Vietnam) is more supportive of their argument than one in which a surge produced what is generally considered a (potential) victory (Iraq). My conclusion was strengthened when I read a late October headline in *The Washington Post:* "Afghanistan Could Turn into Vietnam. Let's Hope So."

In effect, the article argues that the cut-and-run strategy of 1973 fostered—only a generation later—a close partnership, lucrative trade and goodwill among the governments, businesses and people of the United States and Vietnam. It was, I thought, the nadir of this journalistic campaign. The intent, apparently, is to establish that the expenditure of lives and treasure in military operations is incidental to the ultimate relationships that will prevail, hence a surge of troops into Afghanistan is not only inadvisable but also unnecessary. I wondered whether a companion article might establish that the political and economic recovery of Germany and Japan following World War II proves that our D-Day assault in Normandy was a waste.

A much more relevant comparison might be between the results obtained when we committed the resources necessary to complete the mission and the results obtained when we did not. World War II, of course, is the prime example of wartime success that followed almost total resource commitment. The same result was achieved in Panama and in the Persian Gulf War when we overwhelmed our enemies in minimum time, as well as in the Cold War when our resource commitment sustained the forces that proved a credible deterrent to the outbreak of World War III.

Iraq's freedom is not yet guaranteed, but the chances of a favorable outcome in that war were vastly improved when a surge of forces was directed. Unlike Vietnam, however, a loss in Iraq would be an incredible gain for the Muslim extremists who pose an international threat never dreamed of by the North Vietnamese.

In Korea, we committed the resources to win but settled for a compromised, satisfactory result. In the interest of saving lives, we "cut" but did not "run." The results of that decision, a vibrant South Korea, are rewarding, but the costs are still being paid 56 years later.

Each of our wars was/is unique. Comparisons tend to be a search for characteristics, common actions and influential decisions that brought about the result and therefore are considered germane to a current situation. Too often such searches are limited to supporting a preconceived conclusion and biased recommendations.

At the time of this writing, a decision regarding the recommendations of GEN McChrystal had not been announced. When it is, we must hope that our mission in Afghanistan will be settled, the resources will be committed and, most importantly, the commitment of the American government and the American people will be firmly established for however long it takes to guarantee the continued liberty of our coming generations. To that end, a loss in Afghanistan might well resurrect the domino theory when the effect on other Middle Eastern nations is contemplated. □



U.S. Army/SGT Teddy Wade

SSG Douglas Noreen, 87th Infantry Regiment, 3rd Brigade Combat Team, 10th Mountain Division, provides security for his convoy in the Nerkh district of Wardak Province, Afghanistan.

***GEN Frederick J. Kroesen**, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.*



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Former AUSA Leader
MG Robert G. Moorhead, 1921–2009

MG Robert G. Moorhead, a member of the Indiana Army National Guard who served in significant leadership positions with the Association of the United States Army for more than 20 years, died in Indianapolis, Ind., on October 11 at the age of 88.

"From his enlistment in Officer Candidate School to his four years of service during World War II to his eventually commanding Indiana's 38th Infantry Division and his final assignment as assistant deputy commanding general, U.S. Army Training and Doctrine Command—the first National Guard officer to hold that position—General Moorhead was a pivotal force in ensuring that our Army was a seamless force of equal and effective components—active, National Guard and U.S. Army Reserve," said AUSA President GEN Gordon R. Sullivan, USA retired.

"His singular and dynamic service to AUSA will go down in the history books, not only for its longevity, but also for the key roles he played on the chapter, regional and national levels of the association he loved so well.

"He will always be remembered for his leadership abilities that were instrumental in developing AUSA into the professional organization it is today: The Voice for the Army—Support for the Soldier," GEN Sullivan added.

Born in Indiana, MG Moorhead graduated from Indiana University and joined the Indiana National Guard upon returning from service in Germany during World War II. He carried on a military tradition begun



when his father served in the Indiana National Guard in the latter years of the 19th century and later commanded a National Guard organization in Europe during World War I.

MG Moorhead served two terms as president of AUSA's Indiana Chapter before becoming a member of the AUSA Advisory Board of Directors from 1972–75 and was chairman of the 1975 National Resolutions Committee. He served two terms as Second Region president and was elected AUSA vice president in 1984. After serving two terms in that position, he was elected president in 1988 and again in 1990, when the title changed to chief executive officer.

In 1992, MG Moorhead became the immediate past chief executive officer, and in 1996 he became the first member of the Council of Trustees to serve in the newly established position of vice president for National Guard and Reserve Affairs. He was reelected for three terms and served in the position until 2005.

MG Moorhead joined Central Publishing Company in 1947 and was its president and owner from 1960–89. He was president of the Indiana State Armory Board for decades, and the downtown Indianapolis armory was renamed Tyndall-Moorhead Armory in his honor. Among his numerous awards and decorations are the Bronze Star Medal with Oak Leaf Cluster and the Indiana Distinguished Service Medal.

A civic leader, philanthropist, Boy Scout Council president and auto racing enthusiast, MG Moorhead is survived by his wife of 61 years Margaret (Maggie) Bachelder, two sons, three daughters, 19 grandchildren and six great-grandchildren. A funeral service followed by a military burial was held in Indianapolis on October 19. □

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Bees and Spiders: Seeing the World from Different Perspectives

By LTC Brian L. Steed

As an exchange officer, I spent many hours in the offices of senior Jordanian officers. I sat and watched as a variety of internal and external guests would come, sit, drink tea, exchange pleasantries and then leave. As the hours of this activity passed, I initially thought to myself, "What a waste of time! They did not *do* anything!" Later I realized that this was the regular process of making and/or strengthening web connections. From their cultural perspective, the people who entered the office were doing something as important as checking off an item on a to-do list.

Military personnel from Middle Eastern cultures differ from U.S. military personnel. This is not simply about differences on the surface—we do not see the world the same way. When a U.S. Army soldier enters a room for a meeting in the Middle East, that soldier is not coming into the room with the same vision of the issues to be discussed as is his Middle Eastern counterpart. This means that events are not perceived in the same way, and techniques for accomplishing tasks will be viewed through a different lens.

There has been a great deal of interaction between the U.S. military and the people of Iraq and of Afghanistan, and working relationships have improved over time. This does not necessarily mean, however, that the other cultures are "coming around" to a Western way of thinking; they are probably adapting their practices to appease the current power broker. If we want to achieve real and lasting transformations, we need to first understand the underlying differences and then make adjustments to shape the discussion in a way that will assist in accomplishing our goals and desires.

The following is a simple analogy to explain this difference. As with any analogy, there are flaws and imperfections; I ask the reader to indulge in a little imaginative thinking when accepting this analogy.

Americans Are to Bees As Arabs Are to Spiders

The bee is defined by individual capabilities that allow it to accomplish its role within a larger community. The bee is a team player who has three main descriptors: task oriented, analysis driven and information sharing.

A bee sees its day as task oriented: It has "x" amount of flowers to collect pollen from in a given day. When the bee returns home at night, it is going to assess the day in terms of how many flowers it collected pollen from, the amount of pollen collected, the distances flown and so on. The bee is concerned with accomplishment of agenda items or task lists. To accomplish this list, the bee must conduct at least basic levels of analysis—how far to fly, how long it will take, how many flowers in the field, how many trips or other bees are required, and a host of other basic analysis items. When the bee finds a particularly rich field or garden with the ideal types of flowers, it returns to the hive and begins a dance that is designed to demonstrate to the rest of the community the direction and distance to the riches. The bee accepts the premise that it is better to share more information with the greatest number of members of the community in the fastest way possible.

Arabs Are to Spiders As Americans Are to Bees

The spider sees success as directly associated with its web in terms of its strength, size, location and effectiveness. The spider defines its daily success by the efforts it has made to strengthen the web. In this analogy, the spider's web is connected not to branches and leaves, but to other spiders.

Each day for the spider is an exercise in sending out additional strands to other spiders—increasing the reach and size of its web or strengthening the existing strands that already connect it to others. The spider does not need to do significant analysis. Basic social networking answers the question of which are the best spiders for future connections. The spider is not interested in sharing information about the location of its web or the other strands and their strength with its other spider connections. To do so would directly threaten the placement and success of its own web. For example, if a spider had a web across a trail that provided particularly good hunting, introducing other spiders to that same location would threaten the current success enjoyed by the spider.

The main motivation is to increase the web. In general, spiders do not work together to build webs. It is also true that within its sphere the spider may show tremendous initiative in choosing the web location, which strands to strengthen and when to have the web prepared. The entire purpose of the web is to reach the point that when some other spider comes for assistance or a favor, the spider can simply tug on a web strand and make some other spider react favorably. The spider with the strongest web, therefore, has the greatest ability to convince others to do as it desires.

U.S. and Middle Eastern Militaries

There are clearly some naturalistic problems with this analogy; however, the analogy generally holds for Americans being bees and Arabs being spiders. The idea is that there is a difference in how different groups, in this case the American military and Middle Eastern military, are motivated and how they define themselves. This is by no means a judgment on one way being better than the other, but rather a critical point that needs to be accepted in conducting business across cultures: Different cultures see the world differently, including at the basic daily level of determining actions and activities.



Joint Combat Camera Center-Iraq/PO1 Steven King

Soldiers from the 1st Infantry Division meet with Iraqi police officers at their station in Balad, Iraq.

A large part of this difference is in the definitions of success held by the bee and by the spider. A U.S. soldier might have a to-do list of tasks, and he mentally or physically checks them off over the course of the day. The day is successful if the highest priority task is accomplished, and if time permits, other tasks are accomplished throughout that day. It is success based on doing.

The Middle Eastern officer bases success on whom one meets with and how many people one has made contact with throughout the day, although the officer probably does not think about it that way himself. He does not determine his success on what he does, but on how he builds or strengthens his network. It is not a linear approach to success, but rather a network- or web-based approach. The officer who sits in offices of more senior officers all day and drinks tea with them and speaks about their families and cultivates connections is building his web. He sends out strands to connect himself socially with those above, equal to and below him. He wants to build this network so that when he needs something, he can reach out and touch a line and make contact with someone who can help him. This is a reason why hospitality is so important. If someone enters another's office, he must feel welcome and be treated well—the strand connecting the two people must be strengthened.

A great deal of effort is placed on such things, in many cases to the detriment of what some Americans have considered real work. Meetings will be interrupted by phone calls with people in the web or to greet someone, even of a lesser rank, who has just entered the room.

This is vitally important to understand, especially when one begins a meeting. If one has the desire to inspire the counterpart to *do* something, then the conversation must be shaped so as to make the doing seem logical within the construct of the counterpart. What motivates a spider to do something is different from what motivates a bee and must be considered prior to the meeting if one truly wants to achieve success. Conducting the meeting on a "bee-only" framework will end in frustration, as the spider will see no value in the logic or arguments.

Bees and spiders coexist in nearly every climate and can thrive together. They serve complementary purposes in meeting the needs of the ecosystem. The same can be said of the cultures addressed here—those of the American military and Middle Eastern military. The fact that the cultures are so different does not mean there must be conflict or even frustration.

To improve working relationships, it is imperative that one sees and understands the differences in culture and how this affects the daily life of each person. Once one understands the cultural paradigm of the other, then it is possible for real productive dialogue and cooperation to exist. □

LTC Brian L. Steed *is the U.S. Army Training and Doctrine Command senior liaison to the Israel Defense Force. He is the author of* Piercing the Fog of War.

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All opinions and suppositions expressed in this work are entirely those of the author and in no way reflect the positions, opinions or policies of the U.S. Army, the U.S. Department of Defense, or any official or agency of the U.S. government.

AUSA Trustee Hudson Named CEO of BAE Systems

Linda Hudson, a member of the Association of the U.S. Army's Council of Trustees, was recently appointed president and CEO of BAE Systems Inc., and chief operating officer of BAE Systems PLC. BAE Systems manages the U.S.-based operating groups—electronics, intelligence and support, and land and armaments—of London-based defense contractor BAE Systems PLC under a special security agreement with the Department of Defense. Hudson is the first and most senior woman to lead a major defense contractor in the industry's history, running a business that employs nearly 50,000 people in more than 130 sites around the globe. Previously the president of BAE Systems' Land and Armaments Operating Group, she succeeds Gen. Anthony (Tony) Zinni, U.S. Marine Corps retired, who was appointed acting president and CEO of BAE Systems in June. To ensure a smooth transition of leadership, Gen. Zinni will continue to serve as chairman of the board of BAE Systems.

Hudson's "many accomplishments, proven performance and dedication to supporting her company's customers clearly demonstrate she has the vision and skill to take BAE Systems into the 21st century and beyond," said AUSA President GEN Gordon R. Sullivan, U.S. Army retired. "She is a very impressive leader."

Hudson joined BAE Systems in December 2006 and served since January 2007 as president of the Land and Armaments Operating Group, the world's largest military vehicle and equipment business. She effectively doubled the

size of the group's land-systems operations with the acquisition of Armor Holdings Inc.

Recently cited as "the first lady of defense" by the London *Sunday Times*, Hudson has held a number of senior management positions with various defense-industry firms. She served as president of General Dynamics Ordnance Systems from 1992 to 1997 and, until May 1999, was the vice president of business development at General Dynamics Corporation. She then served for seven years as corporate vice president and president, armament and technical products, at General Dynamics.

From 1985 to 1992, Hudson served as program director, electro-optical systems, then director of air defense production operations for Martin Marietta Corporation. From 1976 to 1985, she held a variety of positions at Ford Aerospace. She began her career in 1972 as a research and development engineer specializing in satellite and communications systems for Harris Corporation.



BAE Systems

Linda Hudson

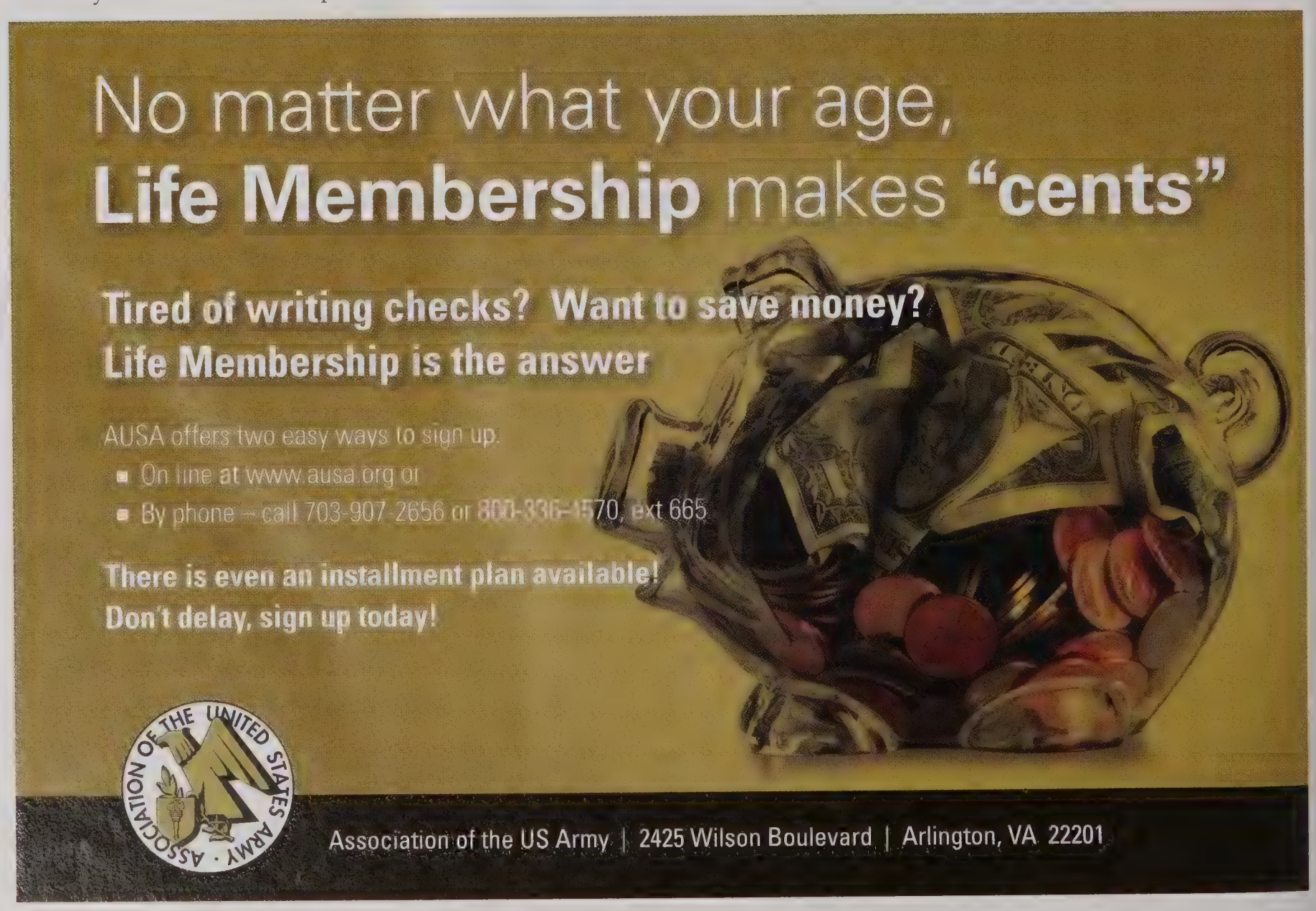
A graduate of the University of Florida, she earned a bachelor's degree, with honors, in systems engineering.

GEN Sullivan noted that Hudson "has served with distinction on our Council of Trustees, where her acumen, leadership and genuine concern for the soldier have contributed materially to our mission of serving as the 'Voice for the Army.'" Hudson also serves on the USO Worldwide Board of Governors and engineer advisory boards for engineering programs at the University of Florida and the University of Maryland. From 2003 to 2008, she was a member of the Norwich University Board of Trustees. She is a member of the District of Columbia and North Carolina chapters of the International Women's Forum as well as a member of C200, a global organization of women business leaders.

In 2003, Hudson became the first woman to receive the National Infantry Association's Military Order of St. Maurice in recognition of her outstanding support of the U.S. Army Infantry. She also was awarded the National Defense Industrial Association's Firepower Award. In 2009, Hudson was named one of *Fortune*'s 50 most powerful women in business.

"We wish her the best in her new position, and we look forward to continue working with her," GEN Sullivan said.

Hudson has one daughter, whose husband is in the U.S. Marine Corps, and three grandchildren. □



Confronting an Unhappy and Ominous Precedent

By Richard Hart Sinnreich

In February 1966, as the United States became increasingly embroiled in South Vietnam, Princeton University historian and retired diplomat George F. Kennan, original author of the containment strategy that, in one form or another, had guided U.S. foreign policy from the outset of the Cold War, was recalled to Washington to testify before the Senate Foreign Relations Committee.

Although Kennan had advised against U.S. involvement in Southeast Asia in the 1950s while still in government, since retiring he had held his peace. Now, deeply disturbed by America's rapidly expanding military commitment, he broke his silence. The war in Vietnam, he warned the senators, was a costly and unnecessary investment of American military power, and one, moreover, almost certain to end in failure.

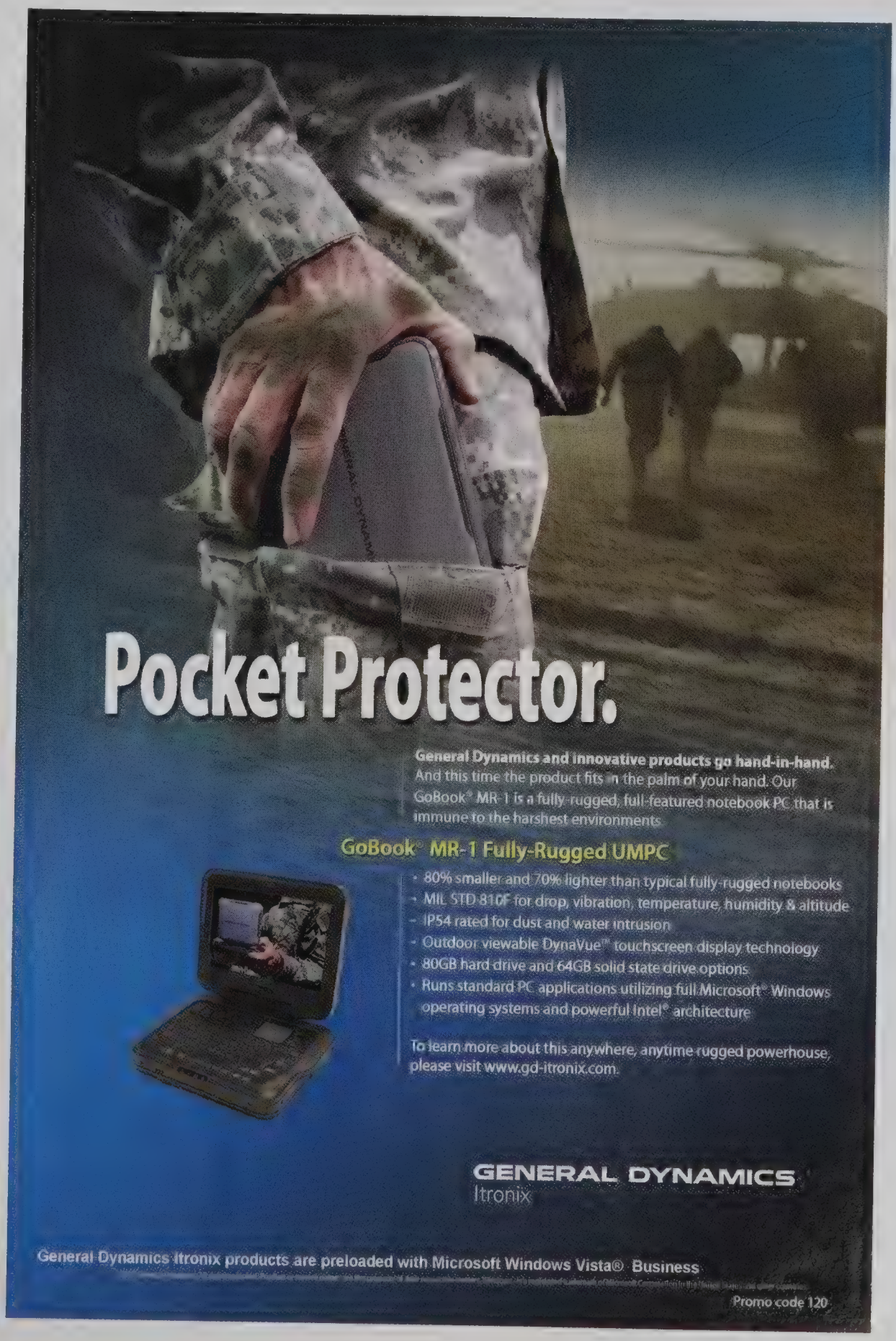
Kennan stopped short of urging an immediate withdrawal, but made it clear that the faster the United States could divest itself of its Vietnam commitment, the better. To those arguing that disengagement would fatally damage America's strategic credibility, he replied, "There is more respect to be won in the opinion of this world by resolute and courageous liquidation of unsound positions than by the most stubborn pursuit of extravagant or unpromising objectives."

His warning went nowhere. Convinced by his own advisors that containment would be derailed by defeat even in as obscure a corner of the world as Vietnam, President Lyndon Johnson increased the nation's commitment from 200,000 troops at the time Kennan testified to more than 500,000 by 1969, when his successor Richard Nixon finally began disengaging.

Three years later, U.S. combat forces were out of Vietnam altogether, and three years after that, North Vietnamese troops marched unopposed into Saigon. Containment survived. Fifty-eight thousand young Americans didn't. Neither did the reputations of the political and military leaders who had sacrificed them so fruitlessly.

It's that unhappy and politically ominous history that confronts Barack Obama as he tries to decide what to do about Afghanistan. As in that earlier case, the security situation has deteriorated. As in that earlier case, many insist that only more troops can reverse it. And, as in that earlier case, some predict strategic catastrophe should failure to provide them enable the insurgents eventually to claim a victory.

Even Defense Secretary Robert Gates, a man not given to hyperbole and who himself has expressed doubt about the



utility of a larger U.S. military footprint, is not above playing Cassandra. Replying to a question recently from CNN's Christiane Amanpour, he noted that Afghanistan "is where the mujahedeen defeated the other superpower. ... they now have the opportunity to defeat a second superpower, which, more than anything, would empower their message."

Others are even more apocalyptic, warning that should the Taliban regain control of Afghanistan, the destabilization of Pakistan wouldn't be far behind, a warning eerily reminiscent of the "domino" theory of the mid-1960s, when some predicted that the fall of South Vietnam to communism would lead inevitably to its domination of the entire East Asian periphery.

That those warnings were wrong 40-odd years ago doesn't necessarily mean that they're wrong today. As many have pointed out, Afghanistan isn't Vietnam, and its connection to the broader problem of Islamic radicalism and global terrorism differentiates it in important respects from its Cold War predecessor.

But if today's warnings deserve to be considered on their merits, so also does Kennan's reminder, tragically validated by subsequent events, that not all strategic problems can be, or for that matter deserve to be, resolved by military force, however judiciously applied. Particularly where nationalism and ideology combine, past efforts by outsiders to suppress internal strife reveal an unpromising track record.

Instead, and since neither we nor our allies seek to rule Afghanistan outright at whatever cost might be required to do so, its future is almost entirely hostage to the resolve of the Afghans themselves, hence to the performance of an indigenous government that so far has done little to earn their confidence and loyalty. That, too, recalls America's experience in Vietnam.

In the circumstances, it's scarcely surprising that President Obama is in no great hurry to approve a troop increase that, on current evidence, is no more assured of producing military success than the one approved by his presidential predecessor 43 years ago.

In September 2002, as the Bush administration debated invading Iraq, 98-year-old George Kennan warned in his final interview that the results of such an attack were unforeseeable. "War has a momentum of its own," he noted. "You know where you begin. You never know where you are going to end."

We can't predict what will happen if we raise the stakes in Afghanistan, any more than we can be sure of what would happen were we to disengage altogether, an option not currently on the table. What we do know from sad experience is that investing merely to recoup sunk costs too often is a prescription for bankruptcy. □

Richard Hart Sinnreich *writes regularly for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the October 11, 2009,* Lawton Constitution *and is reprinted by permission of the author.*

2010 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

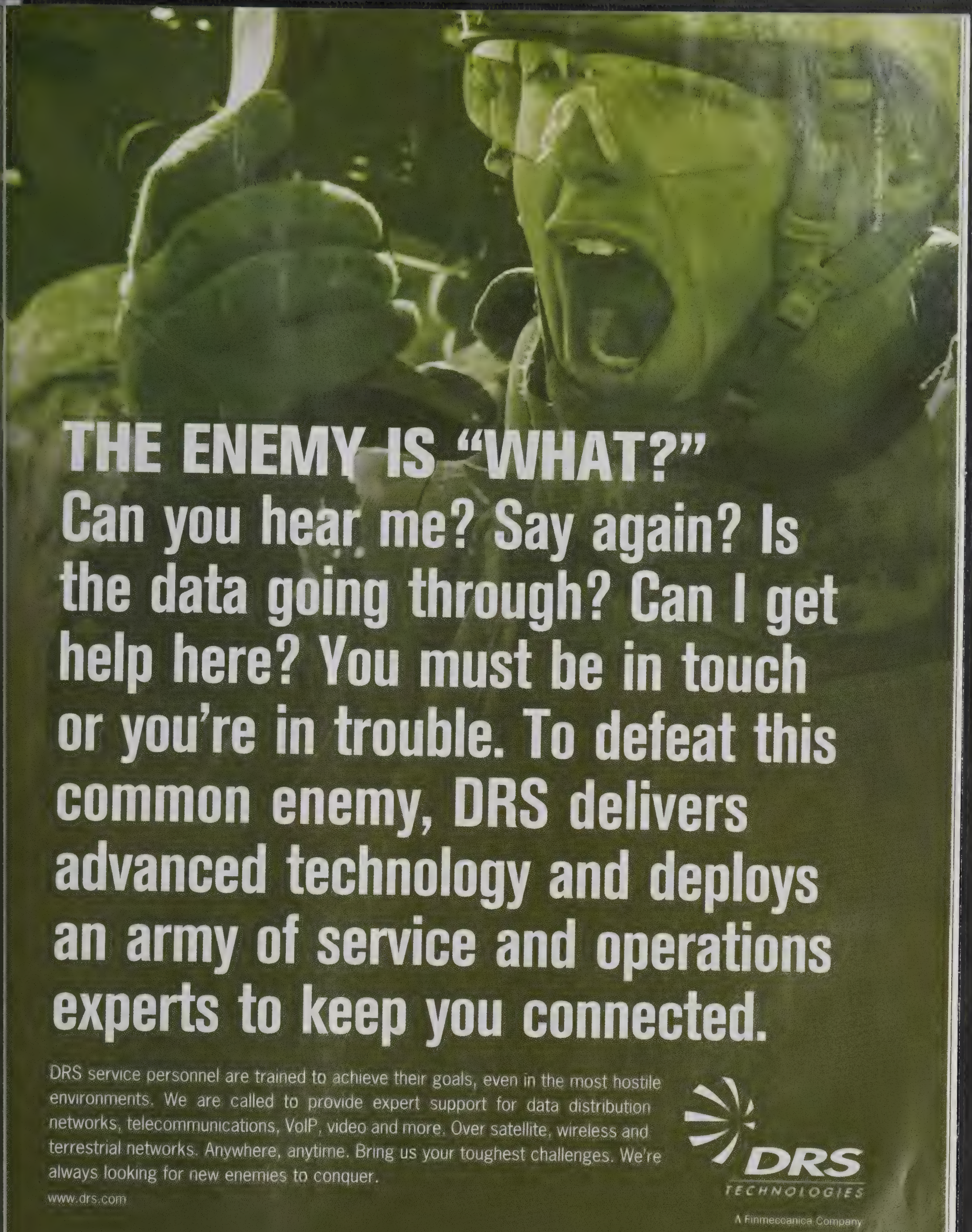
The Association of the U.S. Army is pleased to announce its fifteenth annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

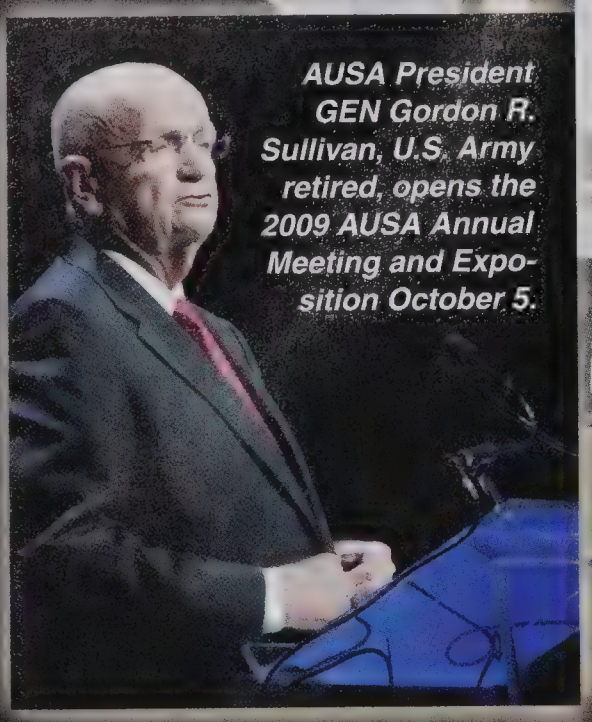
Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2009.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints, color prints or color slides. Photographs must not be tinted or altered. (Send digital photos to jdow@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The smallest format for slides is 35mm, and slides must be in plastic or paper mounts.
7. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, Social Security number (for identification and tax purposes), address and telephone number, and caption information.
8. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
9. Entries must be postmarked not later than June 30, 2010. Letters notifying the winners will be mailed in September.
10. Entries will not be returned.
11. Employees of AUSA and their family members are not eligible.
12. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
13. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jeremy Dow (jdow@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.


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The 2009 AUSA Annual Meeting and Exposition



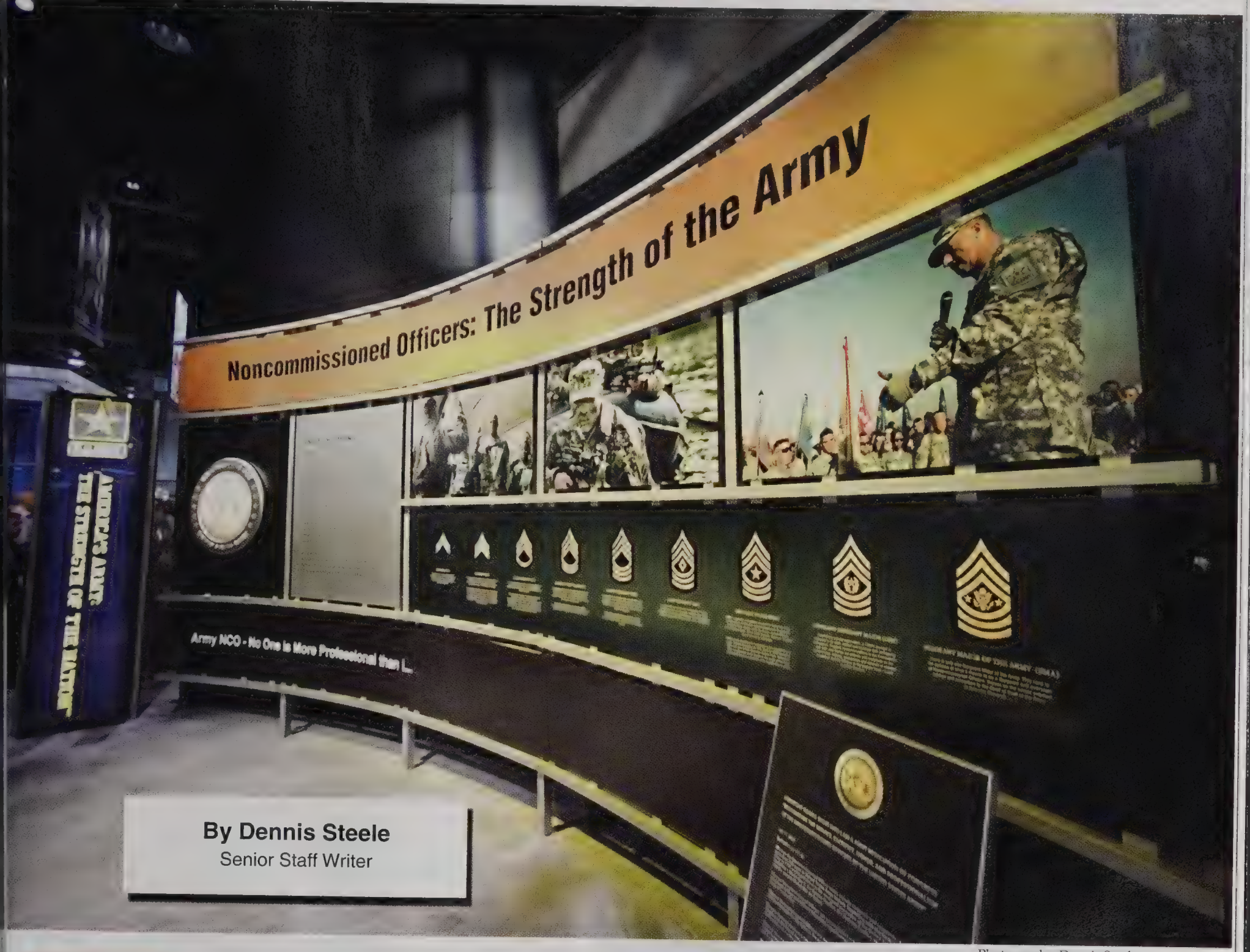
AUSA President GEN Gordon R. Sullivan, U.S. Army retired, opens the 2009 AUSA Annual Meeting and Exposition October 5.





Army Vice Chief of Staff GEN Peter Chiarelli, far left, and Sergeant Major of the Army Kenneth O. Preston, far right, flank 2009 Soldier of the Year SPC Clancey Henderson, Forces Command, and 2009 NCO of the Year SFC Aaron Beckman, U.S. Army Europe, at the AUSA Annual Meeting awards presentation.

A Professional Development Forum



By Dennis Steele
Senior Staff Writer

Photographs: Dennis Steele

The 2009 AUSA Annual Meeting and Exposition began as President Barack Obama deliberated strategic recommendations and resource options submitted by GEN Stanley A. McChrystal, commander of the International Security Assistance Force and U.S. Forces-Afghanistan.

GEN McChrystal's report painted a grim picture of the current security situation and predicted a dire situation if more is not done to counter Taliban gains in the next year.

The AUSA Annual Meeting and Exposition featured more than 500 Army and industry exhibitors in the Walter E. Washington Convention Center and drew an attendance of more than 33,000. It was preceded by the 25th annual Army Ten-Miler, with more than 30,000 registered runners.

"I believe that the decisions that the President will make for the next stage of the Afghanistan campaign will be among the most important of his presidency," said Secretary of Defense Robert M. Gates, the keynote speaker at the meeting's opening ceremony. "So it is important that we take our time to do all we can to get this right. And in this process it is imperative that all of us taking part in these deliberations—civilian and military alike—provide our best advice to the President candidly but privately. And speaking for the Department of Defense, once the Commander in Chief makes his decisions, we will salute and execute those decisions faithfully and to the best of our ability." (For the complete text of Secretary Gates' address, please turn to page 35.)

"Our nation is understandably weary after six years in Iraq and eight years in Afghanistan," Secretary Gates noted. "Of course, the challenges America faces in these campaigns are reflected back here in the demands placed on an Army under strain ... [and] the reality is that a significant number of soldiers will continue to be deployed for the near- to mid-term. In fact, right now there are more soldiers in Iraq and Afghanistan combined than were deployed to those two countries during the height of the Iraq surge," he said.

"The challenge I posed to the Army two years ago was to retain the lessons learned and capabilities gained in counterinsurgency and irregular warfare. From all I've seen, heard and witnessed, that certainly has taken place. In fact, today's Army bears but a passing resemblance to that of eight years ago—a force mostly designed to repeat



another Desert Storm. The Army we have is a supremely adaptable and flexible force, able to deploy rapidly, operate with more autonomy and slide along the scale of the conflict spectrum to confront very different types of threats," Secretary Gates said.

"The Army has recognized that the most important part of its procurement strategy is the network as opposed to the platform," he continued. "In coming years, there should be revolutionary breakthroughs in the ability of our troops to see themselves and other allied forces—even if the inevitable fog of war and resourceful enemies prevent us from ever achieving total situational awareness."

According to the Secretary, advances in battlefield concepts and doctrine have led to the formation of "advise and assist brigades" that he said will compose nearly all of the Operation Iraqi Freedom force by the end of next year.

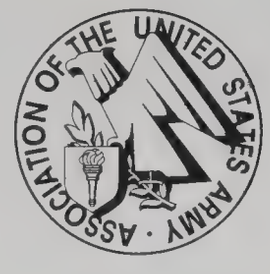
"There is, unfortunately, still a lingering view that advisory positions are second-tier jobs—an assumption that needs to be addressed through assignments and promotions," he said. "The [advise], train and equip mission is a key role for the Army going forward, given that America's



security will increasingly depend on our ability to build the capabilities of other nations. These capabilities are all the more necessary, considering the steep human, political and financial costs of direct U.S. military intervention."

"That brings me to a larger point," Secretary Gates added. "For the last few years, there has been a concern that our force is too focused on counterinsurgency and has lost its edge for complex, conventional operations involving multiple brigades or divisions. The experiences of the British colonial army before World War I and the Israeli military in Lebanon have even been cited. This is a legitimate concern, and we continue to work toward finding the right balance. But the notion that the changes we have seen amount to turning the Army into some sort of counterinsurgency constabulary that is losing its core competencies—above all, to shoot, move and communicate—does not reflect the realities of the current campaigns ... and let there be no doubt that modernization plans for the full spectrum of warfare continue. The Army is accelerating the development of the Warfighter Information Network and will field it [along with proven Future Combat Systems spin offs] across the entire force. I remain committed to the Army's ground-vehicle modernization program, but it has to be done in a way that reflects the lessons we've learned [during] the last few years about war in the 21st century and that incorporates the Department of Defense's nearly $30 billion investment in MRAPs [mine resistant ambush protected vehicles].

"We have to recognize that the black-and-white distinction between conventional war and irregular war is an outdated model," Secretary Gates continued. "Simply possessing the ability to annihilate other militaries in a conventional fight in no way ensures we can achieve our



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strategic goals—a point driven home in both Iraq and Afghanistan. In reality, the future will be more complex—where all conflict will range across a broad spectrum of operations and lethality, where even near-peer competitors will use irregular or asymmetric tactics, and nonstate actors may have weapons of mass destruction or sophisticated missiles.

"Even as we prepare for the future and pursue modernization plans, we must always recognize the limits of technology and be modest about what military force alone can accomplish. Advances in precision, sensor information and satellite technologies have led to extraordinary gains that will continue to give the U.S. military an edge over its adversaries. But no one should ever neglect the psychological, cultural, political and human dimensions of war or succumb to the techno-optimism that has muddled strategic thinking in the past. That is especially true for the ground services, which will be in the lead for—and bear the brunt of—irregular and hybrid campaigns in the future," Secretary Gates said.



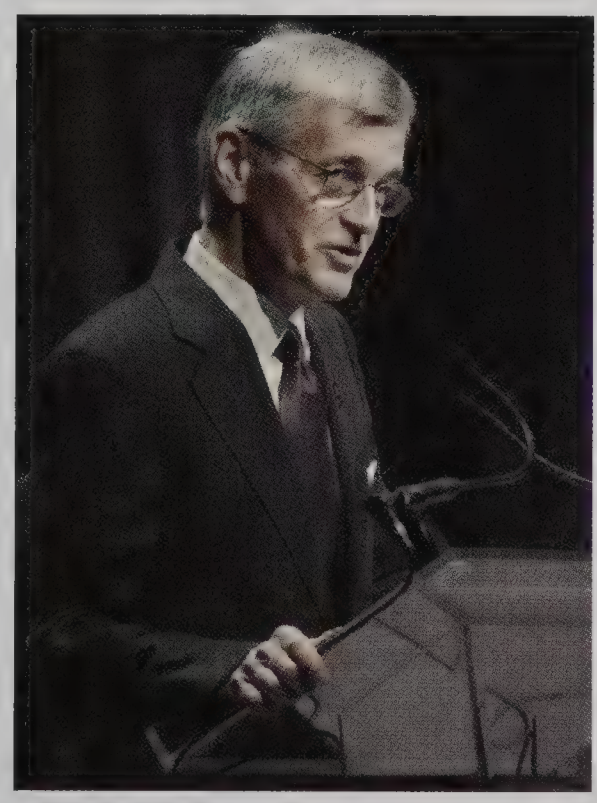
GEN David H. Petraeus

Secretary of the Army John McHugh

Introducing Secretary Gates was the new Secretary of the Army, John McHugh, who was sworn into office just days before the Annual Meeting.

"I have to tell you that the days ahead, of course, are of great challenge," Secretary McHugh said. "We find ourselves faced, it seems at times, by more crises than there are hours in the day in which to confront them. But I can tell you this as well: Failure is not an option. We will, we can, we must succeed. And as more than 230 years in the history of this great U.S. Army have shown you, the men and women who put that uniform on will be equal to this challenge as long as we stand by them, as long as you in the AUSA and we in the civilian and military leadership provide them with the tools that they need.

"We can talk about weapons platforms; we can talk about all kinds of sophisticated, secret instruments of power that are so important to ensure that our men and women in uniform have the edge. But the reason we succeed, as I mentioned today, is not any more complex than it was in the days when our birth first occurred: the men and women in uniform, those who go out every day, who become involved—not for power, not for glory, not for money, but because they love this country, and they are willing to give whatever it takes to help it succeed," Secretary McHugh said.



Secretary of the Army John McHugh

GEN David H. Petraeus

GEN David H. Petraeus, commander of U.S. Central Command (CENTCOM), gave a special presentation at the Annual Meeting, even as he shuttled between meetings with President Obama and his advisors and the Pentagon to help set the strategy and resourcing for Afghanistan.

He gave an overview of the situation across the expanse of CENTCOM, which has more than 230,000 troops operating in 20 countries that encompass a range of ethnic problems, sectarian problems, tribal issues and economic disparity.

"All told, it's an area that has just about every challenge that you might possibly consider. There are extremist elements, national ones and transnational ones; there are terrorist groups … militia elements … weak governments … inadequate basic services … pirates … arms smugglers … narcotics industry bosses," GEN Petraeus explained. "And, of course, we have the substantial challenges in Iraq, Afghanistan, Pakistan and Iran."

He said there has been substantial progress in Iraq, but significant challenges remain. Nevertheless, U.S. forces will be below 50,000 by September of next year.

Concerning Afghanistan, GEN Petraeus said, "GEN McChrystal has assessed that the situation there is serious but doable. That's an assessment that we agree with.

"I have said for a number of months—really since I took over [this] job … that the effort in Afghanistan obviously requires a sustained, substantial commitment. I'm not going to get into whether that means more or less [or] what number of forces, enablers, trainers and civilians," he added. "We've obviously been deploying a substantial augmentation during the course of this year, a combination of decisions made by President Bush and then by President Obama. All told, we will have gone from about 30,000 or 31,000 to about 68,000 U.S. forces on the ground."

The CENTCOM commander said that additional Afghan national security forces are needed to help Afghanistan face "an industrial-strength insur-

gency" and that a regional approach must be taken, one that especially includes the situation in Pakistan.

"What happens in one country greatly influences what happens in the other," GEN Petraeus said. "As we look ahead, clearly ... there has been a deterioration in the [Afghanistan-Pakistan border tribal areas'] security situation, particularly in several key areas. ... Reversing that cycle of violence—arresting the downward spiral in some of these key areas—is very important."

He said that the narcotics industry in Afghanistan is a significant problem. "Not only does it provide substantial revenues to the insurgents, it also erodes the very fabric of whatever rule of law is attempted to be instituted," he explained. "So that has to be addressed, as does the overall level of corruption that has crept into the [Afghan] government."

GEN Petraeus added that the overall Afghan governmental capacity issue is extremely important. "In some respects, an awful lot of analysts see this as the long pole in the tent," he said. "That governmental capacity ... has to be seen as serving the people, not preying on them, and in many cases, it's been quite widely reported, there are levels of corruption that are obviously unacceptable if that is to be the goal. Legitimacy of the government is a key ingredient in any counterinsurgency, and this is going to take considerable effort in the months and years ahead."

"Let me talk about the process that is under way," GEN Petraeus continued. "[GEN McChrystal has published] what was called the initial assessment. This was his assessment of the situation on the ground, and [it] also laid out the implementation plan that he believed is the right way to go, given [the Obama administration's previously stated] Afghanistan-Pakistan strategy. ... That, of course, is the document that was leaked, and we are now working on what are called the resource options piece [that actually resources] the strategy," he explained.

"We had a very good three-hour session with the President last week; there's another three-hour session tomorrow, another two days after that. ... This has been a very substantial endeavor. It is moving quite rapidly. There is recognition of the need to move through this," GEN Petraeus said.

GEN George W. Casey Jr.

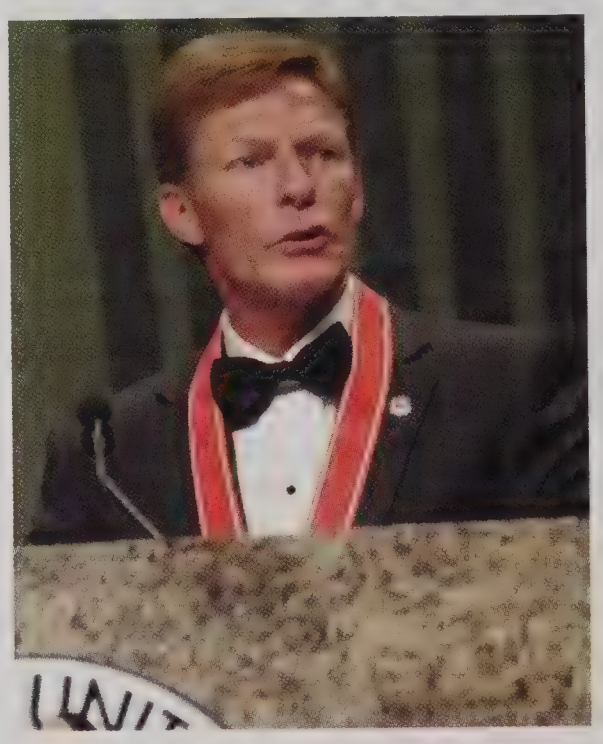
Army Chief of Staff GEN George W. Casey Jr. said during his address at the Annual Meeting's Eisenhower Luncheon: "Looking us in the face are decisions yet to be made about Afghanistan. It will impact on us, but I can also tell you that I will do in the next few weeks what you would expect of any of our Army leaders: I will balance mission and men, and I will work with the other service chiefs to provide the forces necessary for success in the current conflict, while balancing that with the needs of our soldiers and families."

GEN Casey said the most important element of that balance is improving dwell time between deployments. "Adding to an improvement in dwell time are recent drawdowns in Iraq, though unknowns about the Army's future in Afghanistan may affect dwell time in unexpected ways," he said.

The Army Chief of Staff said that the goal is to establish a rotation cycle of one year deployed/two years at home for active Army forces, and one year deployed/four years at home for the reserve components by 2011.

George C. Marshall Medal

At the Annual Meeting's Marshall Dinner, the 2009 George C. Marshall Medal, AUSA's highest award, was presented to Kenneth Fisher, chairman of the board of trustees and chief executive officer of the Fisher House Foundation. The foundation has built 43 Fisher Houses (and will add a dozen more this year) that provide families of wounded servicemembers with free housing so they can be near their loved ones as they recover. Fisher's late uncle, Zachary Fisher, began the Fisher House program 19 years ago.



Kenneth Fisher

"It is a source of great pride that I have been entrusted with the responsibility of overseeing an organization that has made such an impact on young lives, and I honor and I respect that trust every day," Fisher said during his acceptance speech.

Fisher said that he was accepting the Marshall Medal on behalf of the volunteers, the communities surrounding the Fisher Houses, and the doctors, nurses and other health-care professionals who care for soldiers and veterans. He also thanked donors to the foundation and noted that the Fisher House Foundation dedicates everything it does to America's military and their families.

"Our service to them is a credit on a ledger that we can never balance; we owe them literally more than we can ever pay," he said. "Many of us ... remember a time when those in uniform and returning veterans were greeted not with cheers and handshakes, but with indifference, disrespect and even contempt." He added, however, that much more needs to be done—not just saying something, but doing something.

"We are united in saying to the bravest among us: 'Thank you for your service,' ... [but] 'thank you for your service' is just not enough anymore," he said. "Our obligation to our newest veterans ... will last for decades and remain critically important. ... In these very tough situations, they don't quit ... and neither should we." ★

Keynote Address, AUSA Annual Meeting



ARMY Magazine/Dennis Steele

DoD and The U.S. Army

By Secretary of Defense Robert M. Gates

It's a real honor to speak at the opening of this conference with its focus on NCOs—the steel spine of the Army. My first encounter with NCOs came back in January 1967, when I was a brand-new second lieutenant with the Air Force. It took me all of about a day-and-a-half before I figured out who it was that really made the military run, or who at least made us junior officers run: the noncommissioned officers. So I did what my sergeant suggested, and the two of us did my job pretty well.

Every morning, one of the first people I see when I walk into my office is an Army NCO. And, as you might expect, he's almost always there when I leave, as well: SGT Jason Easom, an E-5 who has been on two tours in Iraq.

As Secretary of Defense, I pay every bit as much attention to what NCOs say now as I did when I was a very green second lieutenant. I always make it a point to meet with and listen to NCOs around the country and in the theater, where they are serving with such honor and distinction. Last month, I had the opportunity to attend the Medal of Honor ceremony for Army SFC Jared Monti. ... His is a story of true valor, and there are so many others. In fact, it is hard to believe that only six Medals of Honor have been bestowed since 2001—all posthumously.

With all that our nation has asked of the Army in recent years—and all that troops like SFC Monti have given—it is important for our soldiers to know that they have such a strong advocate in this organization. For more than half a century, AUSA chapters across the country, and the headquarters here, have aided the troops and the families at home and—especially relevant today—when our soldiers are deployed. This takes many forms, from care packages to family-support conferences to scholarship donations, all unified by a single purpose: giving our soldiers and their families the support they have earned.

I spoke to this gathering in 2007, less than a year after I became Secretary of Defense. There's an old saying about the one-year mark in Washington: "For the first six months, you wonder how the hell you got here. For the next six months, you wonder how the hell the rest of them got here." I might add that, after nearly three years, you start wondering how the hell you're still here.

Much has happened since I last spoke with you, from the changing nature of the wars in Iraq and Afghanistan to the economic crisis facing our country. Of course, we have a new Commander in Chief. I can tell you that President Obama is committed to the well-being of every soldier and to making sure they have the tools to do their job, and the First Lady has made it a personal priority to support and champion our military families.



ARMY Magazine/Dennis Steele

If you had asked me in October of 2007 if I would be addressing this forum two years later—still as Secretary of Defense—I would have told you you were crazy. But when President Obama asked me to stay on, I thought about all the troops we have in combat who are serving their country far from home and often under fire. I thought especially about the soldiers who have borne the brunt of the wars with repeated and lengthy tours—who continue to reenlist and redeploy with a great sense of purpose in their mission and a great sense of pride in their country. I thought about their sacrifices and the sacrifices of their families. I thought about all those things and knew that I could only say yes to the new President. Our troops are all doing their duty, and I had to do mine. Having the chance to serve with them is the greatest—and most humbling—experience and honor of my life.

Today I want to talk about the Army: the current challenges we face; what the Department of Defense is doing for our soldiers right now and what it needs to do in the future; and, finally, some thoughts about where the service needs to go in the years ahead.

First, however, a few words about the campaigns in Iraq and Afghanistan. As you know, in June, the U.S. mission in Iraq underwent a sea change as we turned security in urban areas over to the Iraqis. That was a significant step as we dramatically reduce our presence early next year following elections and continue to shift to a purely advise-and-assist mission. GEN [Raymond T.] Odierno said last week that violence is down 85 percent over the past two years, an accomplishment made possible by the hard work and sacrifices of many thousands of U.S. soldiers.

At the same time, Afghanistan has been on a different—and worrisome—trajectory, with violence levels up some 60 percent from last year. I believe that the decisions that the President will make for the next stage of the Afghanistan campaign will be among the most important of his presidency, so it is important that we take our time to do all we can to get this right. In this process it is imperative that all of us taking part in these deliberations—civilian and military alike—provide our best advice to the President candidly but privately. Speaking for the Department of Defense, once the Commander in Chief makes his decisions, we will salute and execute those decisions faithfully and to the best of our ability.

Even as we consider the future, I am prepared to respond to urgent needs and will keep pushing to get troops the equipment they need. IEDs [improvised explosive devices] remain the number-one cause of casualties in Afghanistan. Let there be no doubt that, as long as our troops are in harm's way, the Department will do everything it can to destroy these IED networks and to protect those heroes in the fight. To accomplish this:

■ I have ordered additional intelligence, surveillance and reconnaissance capabilities to Afghanistan, including the most advanced drones and new platforms such as the MC-12.

■ Thousands of enablers, including additional EOD [explosive ordnance disposal] teams, are en route.

■ The first MRAPs [mine resistant ambush protected vehicles] designed specifically for Afghanistan's rugged terrain—the M-ATVs—were delivered to theater last week, only three months after the initial contracts were awarded. In the next year, we will field thousands of these lifesaving vehicles.

Our nation is understandably weary after six years in Iraq and eight years in Afghanistan. Of course, the challenges America faces in these campaigns are reflected back here in the demands placed on an Army under strain. Easing that strain and getting the troops what they need drove many of the changes reflected in the fiscal year 2010 budget. The broad goal was to improve and institutionalize support for troops and their families, rebalance the Department to address a wider range of threats, and, correspondingly, reform how and what we buy.

Let me start with some of the programs we have to support families. We all know the old saying that "you recruit the soldier, but you reenlist the family."

■ The base budget we submitted earlier this year includes $9 billion for family support: child care, spousal services and housing, among others. Perhaps more important, we shifted funds from supplemental war bills to the base budget, to ensure that these family programs won't go away when the wars do.

■ Another change is the new GI Bill approved by Congress last year and just coming on line. The generous benefits are a just reward for our servicemembers and a badly

needed update to the old GI Bill. Also, for the first time, troops can transfer benefits to family members—an idea I pushed at the suggestion of an Army spouse at Fort Hood. On that point, I should note that I always value meeting with Army spouses because, as you are well aware, they are never afraid to speak their minds.

■ At the same time, we have added funds for the wounded, ill and injured; traumatic brain injury; and psychological-health programs to make sure our troops get the care they need when they return home. This includes a major effort by the Army to educate the force to prevent suicides and address the unseen wounds of war—to approach mental health in much the same way as physical health. The dramatic rise in suicides is a huge concern of mine, and I take heart that the Army is every bit as concerned. The Vice Chief of Staff is spearheading the service's effort to reduce suicide, and I can tell you that it is both GEN [George W.] Casey's and GEN [Peter W.] Chiarelli's personal mission to address this problem. Aside from the conflicts themselves, taking care of our wounded warriors must be our highest priority.

■ The Department of Defense is doing more for military families than it ever has. Yet when I visit bases around the country, there is often a disconnect. I believe we must do a better job delivering assistance—especially new programs—to those who need it most. We have to make it easier for them to know what's out there so they can take advantage of these initiatives.

Strong recruiting and retention—though influenced by the economy—continue to show the willingness of young Americans to serve.

■ The active Army has surpassed recruiting and retention goals recently, allowing the service to reach its goal of enlarging to 547,000 soldiers earlier this year. Considering the stress on the force and upcoming deployment rotations, I've also authorized a temporary expansion of an additional 22,000 soldiers to get through this high-demand period. This temporary increase will not add new force structure but will fill out the units we already have. The goal is to end stop-loss and increase dwell time.

■ The Army has eliminated most waivers, and this year will exceed 90 percent for the number of recruits with high-school diplomas.

■ Finally, efforts continue to make this a single Army, with the Guard and Reserve receiving the comparable training and the same equipment as the active force. Though the pace and types of missions will change, the reserve components' operational responsibilities will continue.

Even with all these efforts to mitigate the stress on the force, the reality is that a significant number of soldiers will continue to be deployed for the near- to mid-term. In fact, right now there are more soldiers in Iraq and Afghanistan combined than were deployed to those two countries during the height of the Iraq surge.

America's soldiers continue to excel on the battlefield, doing extraordinary things under incredible pressure. As we look to the future, it is the great innovation and shifts in the Army these last few years—institutionally and operationally—that must guide the service going forward. What have we learned in the last few years and how is it relevant to the potential conflicts of tomorrow?

The challenge I posed to the Army two years ago was to retain the lessons learned and capabilities gained in counterinsurgency and irregular warfare. From all I've seen, heard and witnessed, that certainly has taken place. In fact, today's Army bears but a passing resemblance to that of eight years ago—a force mostly designed to repeat another Desert Storm. The Army we have is a supremely adaptable and flexible force, able to deploy rapidly, operate with more autonomy and slide along the scale of the conflict spectrum to confront very different types of threats.

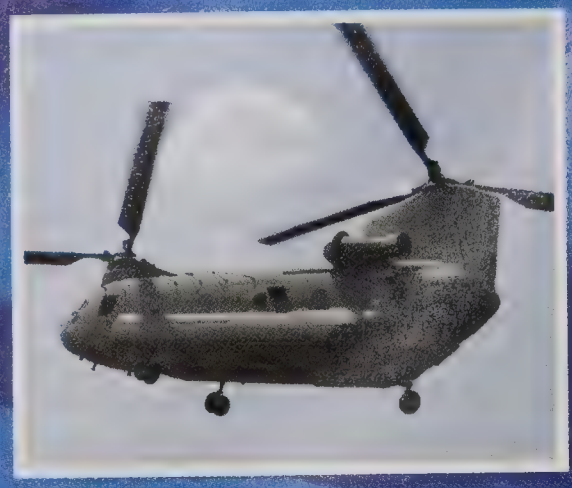
Let me give a few examples. First of all, on the technological side, there have been tremendous advances in our intelligence, surveillance and reconnaissance capabilities—advances that have led to an unprecedented fusion of intelligence and operations on the ground. Other communications improvements have led to much greater command and control, and more tools to improve this further are getting out to the field. The Army has recognized that the most important part of its procurement strategy is the network, as opposed to the platform. In coming years, there should be revolutionary breakthroughs in the ability of our troops to see themselves and other allied forces, even if the inevitable fog of war and resourceful enemies prevent us from ever achieving total situational awareness.

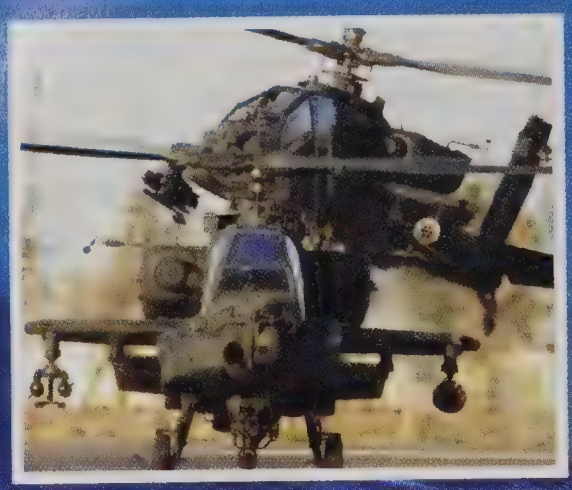
There have also been entirely new concepts from the war zones. One of the most important is the advise-and-assist brigade—the AAB—that has three main functions: traditional strike capabilities, advisory roles, and the enablers and command and control to support both functions. In July, I visited the first AAB deployed to Iraq. I was impressed with the ability to retool a standard brigade combat team in only a few months and with relatively small force augmentation. By the end of next year, we plan for the Iraq mission to be composed almost entirely of AABs, and the expectation is that, some time down the road, the same will be true in Afghanistan.

There is, unfortunately, still a lingering view that advisory positions are second-tier jobs—an assumption that needs to be addressed through assignments and promotions. The [advise], train and equip mission is a key role for the Army going forward, given that America's security will increasingly depend on our ability to build the capabilities of other nations. These capabilities are all the more necessary considering the steep human, political and financial costs of direct U.S. military intervention.

Under the leadership of GEN [Martin E.] Dempsey, the Army has also put its training and doctrine process on a war footing. At the Combined Arms Center, the doctrinal cycle has been reduced dramatically. For example, the AAB doctrine was developed and fielded in only a couple of months—proof that the Army has accelerated its ability to adapt to rapidly changing circumstances. This is a key advantage not just in a counterinsurgency, but in any type of

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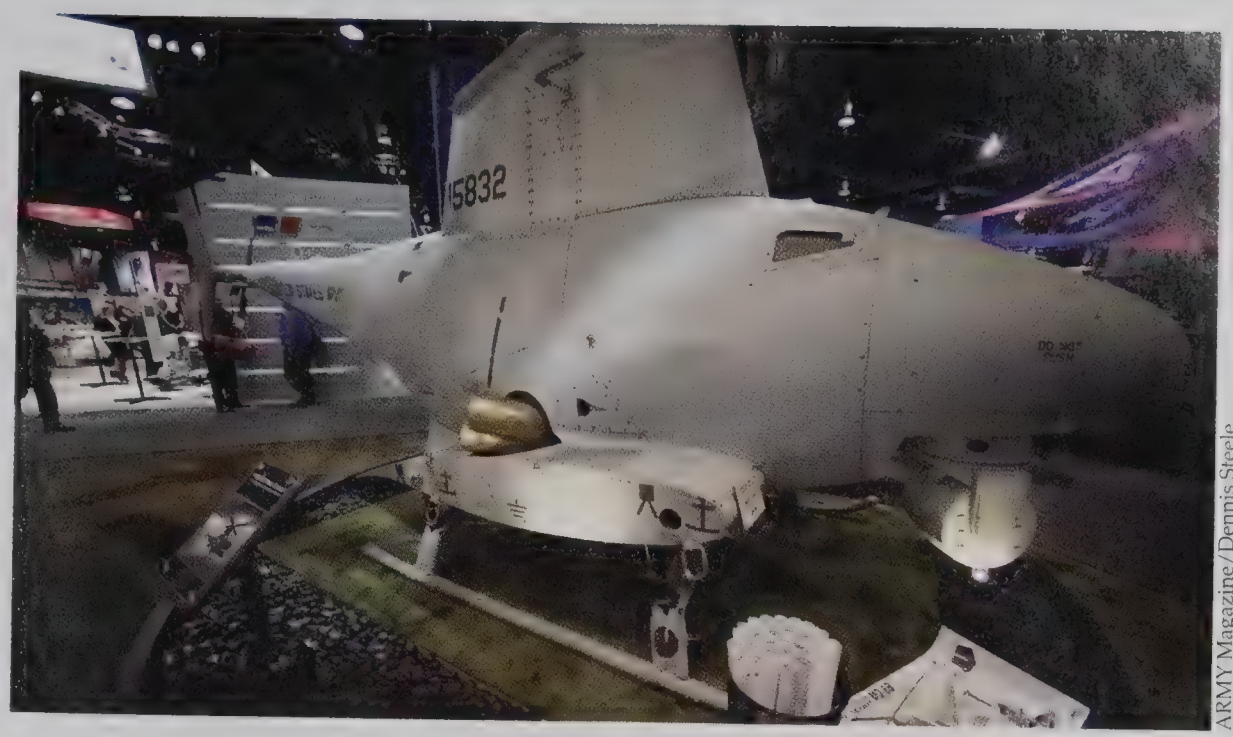
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conflict, where the 75 percent solution fielded in months is often far better than a 99 percent solution that might take years. We cannot allow the Army's ability to swiftly adapt at the institutional level to become ossified down the line.

Perhaps the greatest change, however, is on the ground level with the men and women on the front lines. Young officers and NCOs at the front have always had to make profound life-and-death decisions. In today's conflicts, their responsibilities are even greater and more complex: playing the roles of warrior, diplomat, mayor, economist, city engineer and tribal liaison—all often at the same time. We must ensure that the kind of mental agility, entrepreneurial spirit and independent judgment required to be effective downrange carries over into future assignments. It's a safe bet that a leader who thrives in an environment of this complexity can adapt quickly to other missions and other forms of war. But, looking forward, we must find a way to retain seasoned young officers and NCOs and give them opportunities to use these same talents when they move on from combat positions of momentous responsibility to more mundane assignments in the bureaucracy. Their battlefield experience must form the core of an Army prepared to fight wars in the future.



ARMY Magazine/Dennis Steele

That brings me to a larger point. For the last few years, there has been a concern that our force is too focused on counterinsurgency and has lost its edge for complex, conventional operations involving multiple brigades or divisions. The experiences of the British colonial army before World War I and the Israeli military in Lebanon have even been cited.

This is a legitimate concern, and we continue to work toward finding the right balance. But the notion that the changes we have seen amount to turning the Army into some sort of counterinsurgency constabulary that is losing its core competencies—above all, to shoot, move and communicate—does not reflect the realities of the current campaigns. Take, for example, the battle of Sadr City last year. In that campaign, U.S. troops had to synchronize air power, artillery and ISR [intelligence, surveillance and reconnaissance], all while maneuvering through an incredibly complex urban environment and coordinating with numerous dispersed units.

Let there be no doubt that modernization plans for the full spectrum of warfare continue. The Army is accelerating the development of the Warfighter Information Network and will field it—and proven FCS [Future Combat Systems] spin offs—across the entire force. I remain committed to the Army's ground-vehicle modernization program, but it has to be done in a way that reflects the lessons we've learned the last few years about war in the 21st century and that incorporates the Department of Defense's nearly $30 billion investment in MRAPs.

We have to recognize that the black-and-white distinction between conventional war and irregular war is an outdated model. Simply possessing the ability to annihilate other militaries in a conventional fight in no way ensures we can achieve our strategic goals—a point driven home in both Iraq and Afghanistan. In reality, the future will be more complex: Where all conflict will range across a broad spectrum of operations and lethality; where even near-peer competitors will use irregular or asymmetric tactics and nonstate actors may have weapons of mass destruction or sophisticated missiles.

Even as we prepare for the future and pursue modernization plans, we must always recognize the limits of technology—and be modest about what military force alone can accomplish. Advances in precision, sensor information and satellite technologies have led to extraordinary gains that will continue to give the U.S. military an edge over its adversaries. But no one should ever neglect the psychological, cultural, political and human dimensions of war or succumb to the techno-optimism that has muddled strategic thinking in the past. That is especially true for the ground services, which will be in the lead for—and bear the brunt of—irregular and hybrid campaigns in the future.

Let me close with a final thought. For eight years now, the Army has been in a constant state of war. Our soldiers have been deployed over and over again, and taken the fight to increasingly battle-hardened and lethal enemies. The stakes have been enormous; the tales of heroism and sacrifice extraordinary. Hundreds of thousands of brave warriors have volunteered to serve their country, knowing they probably would go to war. They have endured time away from family and friends, and they have risked their lives for their fellow soldiers.

There is no way to overstate the challenges facing our Army. But when I think about the individual soldiers—their honor and their courage—I am confident that the United States Army will continue to meet those challenges and, as always, exceed every expectation in the years ahead. ★

The Battlefield Surveil



U.S. Army/MAJ Kimberly Miller

Headquarters and Headquarters Company, 163rd Military Intelligence Battalion, prepares to roll out in mine resistant ambush protected vehicles from Joint Base Balad, Iraq, in April.

One Sunday afternoon in March the 2nd Platoon, Troop B, 38th Cavalry Regiment (Long-range Surveillance [LRS]), conducted dismounted patrols with their Iraqi army (IA) partners from 4th Battalion, 10th Brigade, 3rd Iraqi Army Division, in Avghani, Iraq, a small, predominantly Turko-

lance Brigade in Iraq



By COL Robert P. Walters Jr.
and LTC Daniel E. Soller

man town located about 12 kilometers north of Tal Afar in the northern Ninewah Province. This was a routine reconnaissance patrol in the poor, dusty village suspected of being a support zone for insurgents operating between Mosul and the Syrian border.

That afternoon, the LRS platoon had some attachments in the form of a human intelligence (HUMINT) collection team and a multifunctional team (MFT) to augment their reconnaissance efforts in Avghani. In addition, the battlefield surveillance brigade (BfSB) had an airborne intelligence, surveillance and reconnaissance (ISR) platform overhead, supporting the mission. At 1543 hours, the LRS tactical operations center (TOC) received notification from the BfSB tactical operations center that the airborne platform had located an insurgent suspected of poisoning a Coalition force water supply. The airborne sensor located the insurgent in Avghani. Upon notification, the first question the platoon sergeant and acting platoon leader asked the TOC was, "Do we have a warrant on this guy?"



U.S. Army/LTC Daniel Soller

The coauthor, COL Robert Walters, commander, 504th Battlefield Surveillance Brigade, briefs long-range surveillance (LRS) soldiers before a unit movement in August.



U.S. Army/CPT Donald Neal

Soldiers from Troop B, 38th Cavalry Regiment (LRS), descend a steep slope on Mount Sinjar in northern Iraq in March.

In late 2008, the governments of Iraq and of the United States signed a status of forces agreement and a strategic framework agreement that outlined the plan for the departure of Coalition forces and the manner in which they would operate within Iraq. The status of forces agreement stipulated that after January 1, 2009, all detentions must be based on a legal warrant signed by an Iraqi judge. Without a warrant, the platoon sergeant was not going to detain anyone.

The BfSB coordinated with the Marine Corps operating environment owners and contacted the unit in Rabiyah that had the warrant. Although the warrant was valid, the unit was committed to another mission and could not respond to the tip. They forwarded the warrant to the BfSB, asking for support to conduct the detention.

Armed with a valid warrant and partnered with an IA company, the platoon sergeant initiated movement to the location provided by the airborne ISR platform. The MFT employed technical collection systems to locate and "fix" the specific house where the insurgent was located. The IA and LRS conducted a "soft knock," entered the house and found 10 males of military age. The MFT conducted tactical questioning and positively identified the target insurgent; they then conducted site exploitation of the house to determine if any incriminating material was present. The insurgent was detained by the IA company while the HUMINT collection team (HCT) questioned the remaining males. The HCT sent the names of the nine males to the BfSB to check whether they were on any target list. They were not, and all were released after their personal identification biometrics data was collected. The LRS and IA turned the detained insurgent over for trial and then conducted a mission hot wash.

At end state, the LRS platoon—with its IA partners and ISR enablers—successfully detained an insurgent without firing a shot and without any collateral damage. The ISR en-

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*COL **Robert P. Walters Jr.** is the commander of the 504th Battlefield Surveillance Brigade (BfSB) in Iraq (dual-hatted as the Task Force Ready and Task Force 504th commander). **LTC Daniel E. Soller** is the commander of the 163rd Military Intelligence Battalion/504th BfSB in Iraq.*

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A 163rd Military Intelligence Battalion convoy prepares a night move near Hawijah, Iraq, about 40 miles northwest of the city of Kirkuk, in July.

ablers allowed the LRS and IA troops to conduct a surgical operation, at a precise location, to confirm the identification of the warranted insurgent and release the innocent bystanders without disrupting the lives of the Avghani citizens.

This mission is an example of the versatility that the BfSB brings to the counterinsurgency (COIN) operating environment. All ISR capabilities cited were either assigned or attached to the BfSB ISR task force headquarters.

The U.S. Army Armor Center assumed proponency of the BfSB in early 2009 and began to develop doctrine to define its operating organization and methods. The first doctrine edition for the BfSB is Field Manual-*Interim* (FM-I) 3-55.1, which is currently in draft form. What makes the BfSB different from the Army of Excellence military intelligence (MI) brigade? The BfSB is unique because of the dual missions it is designed to perform. On the one hand, it is designed to provide the division commanding general with the traditional counterintelligence, HUMINT, signals intelligence (SIGINT) and unmanned aerial systems capabilities that the legacy MI brigade provided direct-support to the division when allocated by the corps commander. It is also designed to conduct independent operations in assigned or unassigned areas within the division operating environment.

The BfSB's capability to execute operational control of organic and attached ISR capabilities in assigned or unassigned operating environments across the spectrum of conflict provides the supported commander at the division or corps echelon with a scalable and adaptable ISR capability that can weight a decisive or supporting effort while simultaneously performing ISR tasks elsewhere in the operating environment.

Although the BfSB is capable of providing the commander with support throughout the full spectrum of combat, it is particularly well-suited for operating in the COIN environment. It contains extremely robust ISR assets necessary for conventional intelligence in a semipermissive COIN environment.

Furthermore, the BfSB ISR task force can accept augmentation by maneuver, fires and effects elements—in addition to traditional intelligence assets—to perform a variety of missions. Although the BfSB was designed to support the division, to date the BfSBs that have deployed to Iraq— the 525th and 504th—have operated for the corps commander. The 504th BfSB is the second of 10 planned BfSBs to be fielded in the Army.

Organization and Employment Observations

The 504th BfSB deployed to Iraq during Operation Iraqi Freedom and consisted of a headquarters, two MI battalions, a long-range surveillance troop, a network support company and a forward support company. Upon deployment, the BfSB received an aerial exploitation battalion in an operational control (OPCON) relationship. The future modified tables of organization and equipment will see the fielding of a cavalry squadron that will contain the long-range surveillance troop and two light cavalry troops.

In Iraq, the 504th BfSB ISR task force headquarters that operated in Ninewah Province was dubbed "TF 504th," whereas the brigade, writ large, was called "TF Ready." The TF 504th task organization consisted of the BfSB headquarters and headquarters company; Troop B, 38th Cavalry (LRS); the 268th Network Support Company; Company A, 163rd MI Battalion; a maintenance slice from the 509th Forward Support Company; and an "OPCONed" aviation reconnaissance system. Alpha Company acted as a direct-support MI company to TF 504th by commanding and controlling a Prophet Triton SIGINT platoon with sensor and a HUMINT collection platoon with four HUMINT teams, and by providing the intelligence collectors for the aviation reconnaissance system.

In addition to managing its organic assets, TF 504th coordinated routinely with a number of organizations operating in or near its operating environment to synchronize ISR plans and operations. Those organizations included Multi-National Force-West (the operating environment



U.S. Army/MAJ Kimberly Miller

Coauthor LTC Daniel Soller, commander, 163rd Military Intelligence Battalion, hands CPT Donald Neal the B Troop, 38th Cavalry (LRS), guidon for safekeeping as the unit transfers authority to Company F, 425th Infantry, in August.

owner), Multi-National Division-North, a heavy brigade combat team (BCT), an armored reconnaissance squadron, three Special Forces operating detachments, military and border training teams, Iraqi army units, and Iraqi police.

Each BfSB MI battalion is organized with a headquarters and headquarters company, a technical collection company, a collection and exploitation company, and a counterintelligence and human intelligence company. The MI battalion is organized to provide trained, equipped and mission-ready intelligence collection teams to support the division's operations.

In practice, the MI battalions in Iraq supported Multi-National Corps-Iraq but provided teams in direct support to the divisional BCTs. The BfSB military intelligence battalion provides clarity of purpose and direction to the MI collection assets supporting the BCTs. The allocation of battalion resources to improve the effectiveness of teams or to weight a decisive effort is also significant among its responsibilities.

As a force provider, the MI battalion conducts its administrative-control responsibilities for direct-support teams but also provides intelligence-collection expertise to the supported maneuver BCTs, similar to what other attachments or augmentees do for the BCT. The MI battalion is well-suited to perform this advisory role because intelligence collection, be it SIGINT or HUMINT, is its primary purpose. By virtue of scale, the MI battalion is able to apply HUMINT or SIGINT collection expertise where it is most needed to support the commander's priorities. Moreover, as a neutral observer of operations in Iraq, each MI battalion is postured to capture and disseminate best practices across the force.

During deployment, MI leaders at every level maintained regular contact with support commands to ensure teams were collecting against the commander's priorities. As a result, the MI unit chain-of-command could quickly engage to forestall or correct any problems that emerged. Examples of this included transporting parts from across Iraq for vehicles in Kirkuk to reduce maintenance downtime and making recommendations to supported BCT S-2 sections to improve their organic and direct-support collection missions.

In short, the MI battalion was a force provider of direct-support collection assets, but its role, often unseen, was to provide services to enable teams and BCTs to collect and disseminate intelligence more effectively. The battalion and company leadership teams ensured that their ISR teams provided supported commanders ISR enabler support.

The Army's battlefield surveillance brigades are a decisive improvement from the legacy corps MI brigades. The BfSBs provide both direct-support ISR teams that are trained and equipped along with an ISR task force that is capable of gaining situational awareness anywhere on the battlefield as required by the supported commander. Based on supported commanders' constant requests for BfSB support, the BfSB organizational design is proving to be exceptionally valuable in Iraq and, based on pending deployment requirements, will continue to provide supported commanders with ISR enablers well into the future. ★

Army Professional Military

We are not doing enough to equip our leaders to face the extremely complex operations in the current operating environment (COE). Our professional education centers are not doing enough. Specifically, they don't provide a program to promote a broader understanding of military history, politics, culture, religion and governance. This is not an all-inclusive list of what our professional military education courses, such as the Captains Career Course or intermediate-level education, should focus on. Without this base of knowledge, however, it is difficult to understand the complex nature of the COE or to conceptualize a plan of action to affect the environment.

What is lacking is a foundation in human events that can serve as examples to leaders making decisions on the ground. An exhaustive study of all military campaigns and their political ramifications is neither needed nor feasible. What is needed is a deliberate course of study that provides examples of previous operations and their effects from the military, political and cultural perspectives that are relevant to the operating environment. In addi-





Leader Development

By
MAJ Robert L. Green



U.S. Army/SSG Matthew Smith



U.S. Army/SGT Jennifer Cohen

Above, SSG Eugenio Rodriguez, 92nd Military Police Company, Baumholder, Germany, coaches Afghan national police officers during tactical movement training in Afghanistan's Paktiya Province in October.

Left, soldiers from Company A, 2nd Battalion, 12th Infantry Regiment, 4th Brigade Combat Team, 4th Infantry Division, conduct a dismounted patrol in a village near Forward Operating Base Blessing in northeastern Afghanistan in October.

tion, leaders should be armed with a basic understanding of the composition and structure of the systems of government in place, host-nation security force structures and roles, significant events in recent and long-term history, and cultures and religions in conflict areas.

Any platoon leader or troop commander worth his salt can seize an objective or secure a piece of critical terrain, given the appropriate resources for the mission. What is more difficult, and more often required in recent and ongoing operations, is the ability to develop an understanding of the relationships between the population, the government (local, provincial and national) and the security forces (police and military), and an understanding of how culture, history (recent and long-term) and religion influence each of these. These factors influence not only the actions required after "seizing the objective," but also play an important role in determining what the objective should be and how it should be seized.

Each operation requires that leaders not only consider the mission, enemy, terrain and weather, troops and support available,

time available and civil considerations, but also the second- and third-order effects on the local population, security forces and leaders, and how those effects will influence future operations. Each situation is different, and there are no templates for success. Attempting to replicate previous successful operations will not ensure success and, under certain circumstances, could even be counterproductive.

Compare the medical field to the ability to understand the environment and conceptualize a plan to affect it. Doctors spend many years learning the science of medicine before they begin to apply their knowledge and understanding—that is, practice on real patients. There is no medical flowchart that allows the medical practitioner to input symptoms, age, height, weight and sex of the patient to produce the proper diagnosis and treatment plan for the patient. What worked to cure the last patient may not be effective on the current patient, but the doctor will apply his or her experience when diagnosing the next patient with similar symptoms.

Even when a diagnosis is reached and treatment begins, the doctor is not finished. There must be follow-up visits with the patient to monitor changes in his health and symptoms to determine if the treatment plan is working. This is greatly enhanced when the doctor develops a relationship with the patient and understands him holistically, not just medically. Conversely, this is made more difficult when the patient is not treated by the same physician, or the physician's notations are inaccurate or incomplete.

In the military realm, leaders cannot input the demographics—gender, religion, occupation, education, history, culture, grievances and economic status—of a population into a formula to determine what is ailing the society or to determine how best to improve the situation. Knowledge of these facts is certainly useful in gaining situational awareness. Situational understanding comes from recognition of how these facts relate to each other at the individual level, and how any applied stimulus will likely affect the situation. Situational understanding only occurs through long-term exposure to, and interaction with, the actors involved in the conflict in a context provided through study and learning.

We have professional journals, after action reviews, best practices publications, and professional military education to assist commanders in understanding the situation in their areas of responsibility and to assist them in developing plans to influence the situation based on what has worked in the past. This is akin to specific case studies of individual patients with unique medical histories and symptoms. Effective application of this knowledge can only be achieved when it is accompanied by a broader understanding of the situation as a whole.

Anyone who has deployed in recent conflicts understands that the most precious resource in preparation for deployment is time. In the past, we have provided interesting articles, reading lists and seminars on counterinsurgency and culture for our leaders. While this is helpful, it is also inadequate.

Reading lists are great, but most leaders don't have the time required to digest volumes of literature. This is like handing someone a bundle of medical texts to prepare her to perform combat lifesaving skills. Every soldier who deploys in support of Operations Iraqi Freedom (OIF) or Enduring Freedom receives combat lifesaver training. This is made possible by a common program of instruction that can be taught at the lowest level. It is effective because it focuses on identified critical skills, is taught by subject-matter experts and the soldiers know it directly benefits them. We need a similar methodology and mind-set for leader development.

The Army developed a CD-ROM specific to OIF (Iraqi Training Program) that covered a variety of topics. This could serve as a good starting point in the development of a new set of tools to enhance leader development on area- and conflict-specific topics. A better approach would be to compile the important and relevant portions, or "nuggets," of the books and articles from our reading lists into a single document organized by topic: a "COE Primer." Each nugget should be accompanied by a brief explanation of why the topic is relevant, a vignette putting the topic in a real-world context, and one or two discussion questions.

The questions should develop critical thinking. They should include scenarios with challenges that do not have right answers. An example would be: "When there is a village with critical shortages of water and electricity, and resources to improve only one of these shortages, which one should take priority?" Once the answer ("fix the water problem") is given, discuss the second- and third-order effects of the decision, and then explore what the possible outcome could have been if a different answer was given ("fix the electricity problem").

A list of books and other literature could accompany the COE Primer for further exploration of a particular topic. If such a list is provided, it should be accompanied by the reason each item was selected; for example, "See Chapter One for a great explanation of the theological and political causes of friction between Shia and Sunni in Iraq." This will assist readers in establishing priorities based on their knowledge of their weaknesses.

Along with the COE Primer, we need to provide concise historical examples of current and past campaigns that illustrate the dynamics of conflict in the context of the military, politics, culture, economy and religion. Case studies on the Marine Corps operation in Fallujah, the Army operation in Tal Afar, the Israel Defense Forces operations in the Second Lebanon War and the Iraqi army operation in Basra are examples of campaigns that could be studied. It may be benefi-

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Afghan National Army (ANA) Command Sergeant Major Seyed Mirzahi briefs SGM Charles Sheard and CSM Marvin Hill, U.S. Central Command, on training tactics at the Kabul Military Training Center in Kabul, Afghanistan. CSM Hill visited the facility for an update on the ANA's force structure and growth.

cial to include other operations of lesser scope, such as military assistance operations in the Philippines and Malaysia. The reader may be less likely to conduct operations like those in the Philippines, yet these still provide useful insights into human dynamics.

These case studies are not intended to provide recipes for success—they should also include operations that concluded in undesired outcomes, such as the Battle of Mogadishu in Somalia or the Battle of Shah-i-Kot in Afghanistan, or even outright failures. They should serve as a framework to discover how the different aspects of the conflict (political, military, cultural and so on) interacted to produce the outcomes that occurred.

Without knowledge of these aspects and their potential interactions, leaders cannot begin to consider them in designing or planning their training and operations. Based on the age and maturity of junior leaders, they may lack the life experience to understand the powerful influence these factors have on individuals. We don't need leaders who can "build a house," but we do need leaders who know enough to include plumbing, electricity, sewage, HVAC, and windows and doors when they decide a "house" needs to be built.

It is often not enough to be right or justified in our actions. The population is often the center of gravity or the critical terrain that we must retain. The support of the population is driven by their perceptions of us and the other actors—such as the enemy, government and indigenous security forces—involved. Through their actions, communications and connections with the population, these actors influence perceptions. These perceptions change over time, but can also be changed instantly based (usually) on negative events such as civilian casualties, corruption or a failure in meeting basic needs. Because of the power of perception, and the complex human dynamics involved in its formulation and maintenance, it is imperative that leaders are equipped to understand the nontactical human dimensions of their situation to gain and retain the support of the population.

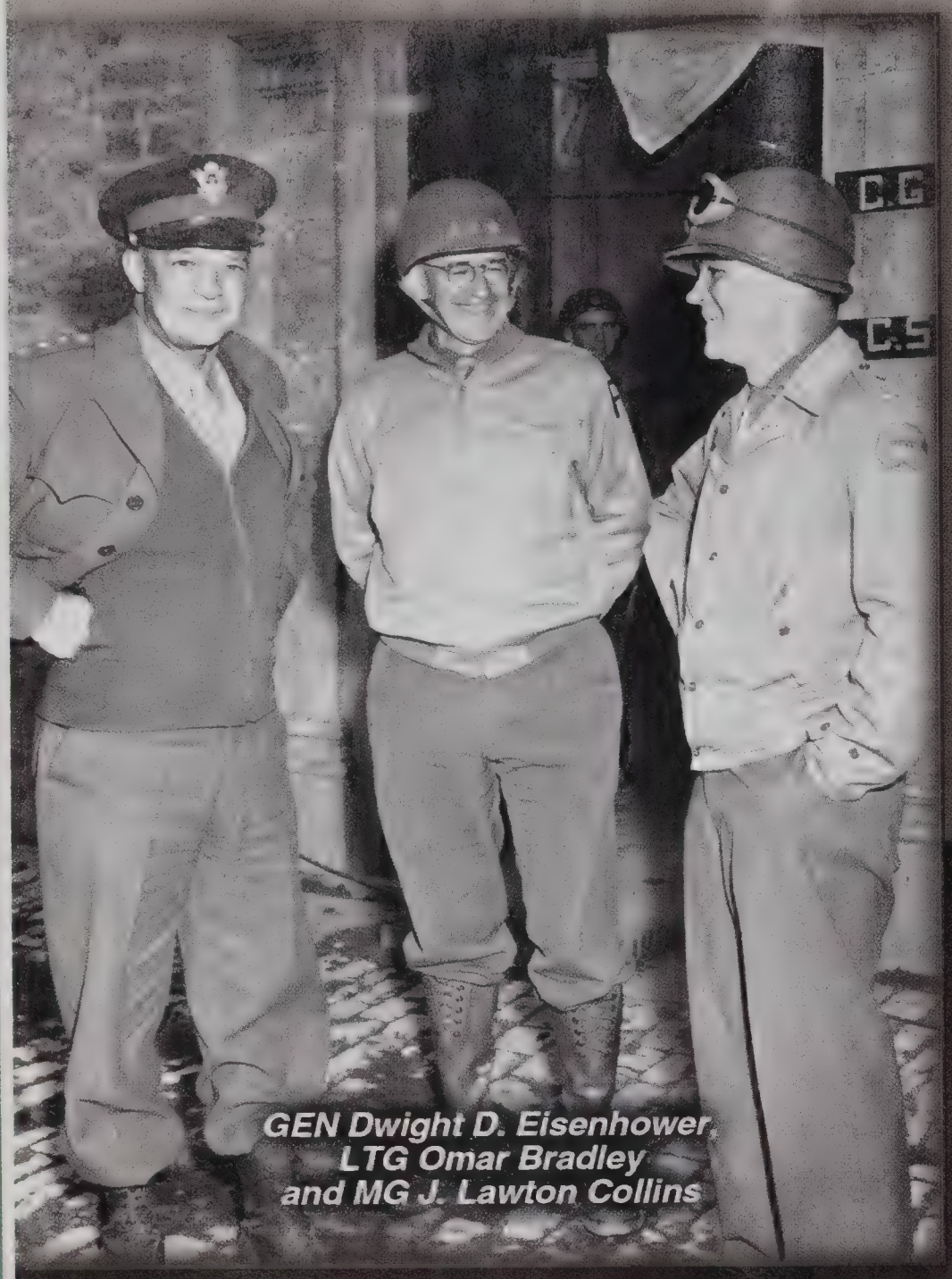
What we need is a COE Primer or course of study that can better educate our leaders on the following topics:

- Military operation case studies of each of the four military activities (combat, security, engagement, and relief and reconstruction) that illustrate the human dynamics in relation to local popular support and perceptions.
- Area-specific articles on culture, religion, and regionally or locally significant historical events.
- Area-specific articles on systems of government, organization of security forces and provision of basic services, and the perceptions of the local population of each.
- Area-specific articles on the enemy actors and external influencers/supporters; their basic motivations, goals and operations; and the local perceptions of each.
- Discussion questions that provoke critical thinking by posing challenge scenarios that have no "right" answers.

While the first and last topics should be broadly applicable, the subsequent topics are area-specific and should be tailored as such. The products should be designed with economy in mind, versus exhaustive coverage of the topic. Each article should include an explanation of why the case study was included, real-world vignettes and discussion questions.

U.S. Army Training and Doctrine Command should take the lead in developing the course and seek input from other services and civilian subject-matter experts. Consider including forms of this course of instruction in the professional-development curriculum at all levels of military education, tailored to the level of expertise and experience of the audience. As a leader progresses from one level to the next (Warrior Leader Course through the Sergeants Major Academy, and Basic Officer Leaders Course through the War College), the complexity increases and builds on the foundation developed at lower levels.

These courses should not be restricted to centers of formal military education; they should be accessible online to allow self-paced learning, distributed learning and continuing education. They should also be available in print to support areas without access to sufficient bandwidth to do the training online. ★



GEN Dwight D. Eisenhower,
LTG Omar Bradley
and MG J. Lawton Collins



General of the Army George C. Marshall



GEN Maxwell D. Taylor



GEN Matthew B. Ridgway



Marshall's MEN

By COL Cole C. Kingseed
U.S. Army retired

Even before the guns fell silent in Europe on V-E Day, British Prime Minister Winston Churchill labeled U.S. Army Chief of Staff General of the Army George C. Marshall as the true "organizer of victory." The Army that Marshall inherited in 1939 stood 17th in the world, ahead of Bulgaria and just behind Portugal.

GEN Eisenhower and LTG Clark



Marshall's success in building the U.S. Army from a token force of fewer than 174,000 officers and enlisted men to more than 8.25 million soldiers by 1945 contributed mightily to Allied victory in the greatest war of the 20th century.

In the 50 years since his death, Marshall has been so glorified in the annals of history that it is difficult to objectively assess the general many consider the greatest American soldier since George Washington. Though Marshall's achievements as Chief of Staff remain legendary, perhaps his greatest triumph lay in his uncanny ability to identify and develop commanders who displayed "aggressive and determined leadership" in the conduct of their duties.

Marshall served two years as Deputy Chief of Staff before taking the oath of office as Army Chief of Staff on September 1, 1939, the day Hitler invaded Poland and World War II began. "My day of induction into office was momentous," he wrote a colleague, "with the starting of what appears to be a world war." At the time, the U.S. Army was top-heavy with an inordinate number of senior generals and colonels whom Marshall considered to have long outlived their usefulness.

In Marshall's eyes, the major impediment to creating a more modern military force was that the U.S. Army had no elimination process. When officers were passed over for promotion, they continued on at their current rank, creating a drag on the whole military system. The Army had an accumulation of colonels who were already in their sixties. Many of these officers either presided over promotion boards or had developed a cadre of younger officers whom they infected with their pessimism.

As Marshall informed Forrest Pogue, his principal postwar biographer, military officers changed considerably at certain points during their careers. Around age 46 or 47, subtle changes in an officer's distinctive characteristics as a leader became evident. By their early fifties, changes were more frequent and by age 60, very frequent. When senior officers neared mandatory retirement in their mid-sixties, very few were usable. Simply put, as the older senior officers aged, "greater was the rarity of finding a man who had retained his previous characteristics of command, control, and organization and administration."

What the Army needed most, in Marshall's opinion, were more youthful commanders who could withstand the rigors of extended field combat. Drawing from his own experience in France in 1918, Marshall noted, "Leadership in the field depends to an important extent on one's legs and stomach and nervous system, and on one's ability to withstand hardships and lack of sleep, and still be disposed energetically and aggressively to command men, to dominate men on the battlefield." He continued: "Only a man of positive characteristics of leadership, with the physical stamina that goes with it, can function under those conditions."

Consequently, with the full support of Secretary of War Henry L. Stimson, the Chief of Staff was instrumental in fostering congressional legislation that established a board of officers to remove the unfit and that authorized the Secretary of War to carry out its recommendations. Thus, Marshall was able to place on the retired list hundreds of officers whom he believed were already "retired on active duty." This was the same bill that allowed Marshall to recommend promotion of officers such as Dwight D. (Ike) Eisenhower, Mark W. Clark and George S. Patton over the heads of literally hundreds of officers far senior in grade.

Having solved the retention problem, Marshall next moved to find the best officers to command the division, corps and army units destined for war. In his desk, he maintained a list of colonels, lieutenant colonels and majors whom he knew or were recommended by others in whom he had great confidence. The names were scrawled in Marshall's famed "black book," along with the names of officers whom Marshall intended never to promote. On the

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COL Cole C. Kingseed, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

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GEN Joseph Stilwell with Chiang Kai-shek and Madame Chiang.



MG Morrison C. Stayer

book's pages were the names of virtually every corps and army commander in the upcoming war.

As usual, Marshall drew heavily upon his own experience, particularly upon the five years he had spent at Fort Benning, Ga., as assistant commandant of the Infantry School. As assistant commandant, Marshall was head of the Academic Department. During his tenure at Fort Benning, some 200 future general officers of World War II (and after) were either students or teachers there.

Heading the Tactical Section at Fort Benning was an "old China hand," LTC Joseph (Vinegar Joe) Stilwell. Convinced that Stilwell was the right man for the job, Marshall had held the tactics section open for a year until Stilwell arrived at the Home of the Infantry. Stilwell totally revised tactical instruction; from then on, he could do little wrong in Marshall's eyes. A leader of enormous prejudices, Stilwell was brilliant, but difficult. Later Stilwell commanded American forces in the China-Burma-India (CBI) Theater, but his chief problem was his tactlessness. On station in China in World War II, Stilwell repeatedly referred to Chiang Kai-shek as "Peanut," though he claimed to Marshall that he was only indiscreet with his personal staff. Chastised by the Army Chief, Stilwell discovered that he couldn't control his staff from communicating his indiscretions to others. Ultimately, Stilwell was relieved of command in the CBI, more for political reasons than military failure. Because Stilwell was a fighter, however, Marshall subsequently appointed him commander of Tenth U.S. Army when its commander, LTG Simon Bolivar Buckner, was killed in action on Okinawa, Japan.

Marshall's choice to lead the Second Section (logistics, supply, training and signal communication) was LTC Morrison C. Stayer. For the Weapons Section, Marshall selected MAJ Omar N. Bradley. Later, Bradley would be the first



GEN Bradley and GEN Patton

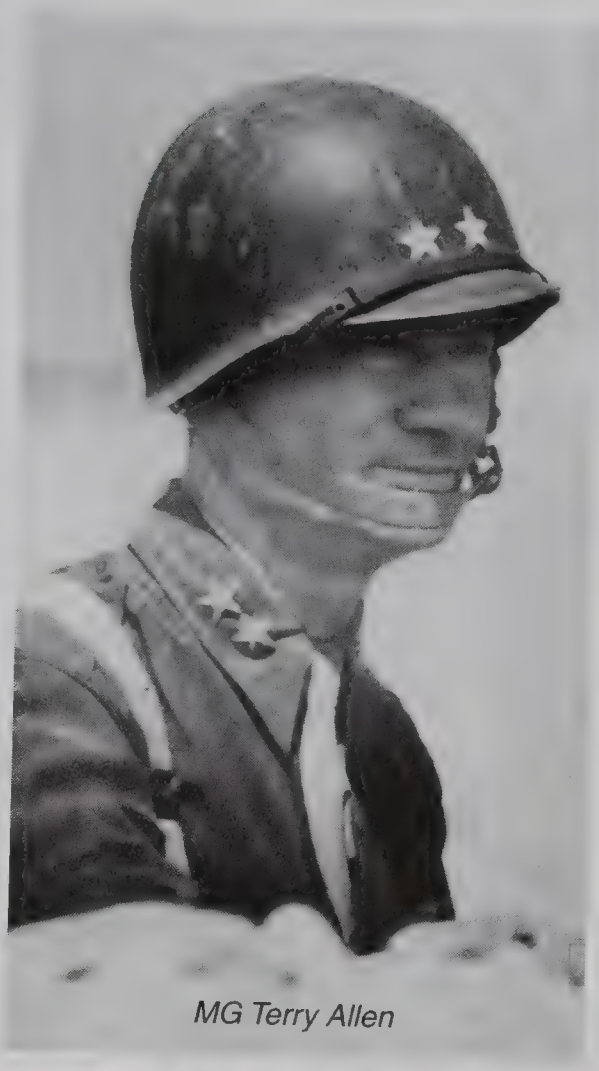
member of his West Point class to wear the stars of a brigadier general in the Regular Army. To lead the Fourth Section, in charge of history and publications, Marshall found another friend from China days, MAJ E. Forrest Harding.

Marshall later confessed that he had also wanted Eisenhower as an instructor at Fort Benning. Marshall had initially met Ike outside GEN John J. Pershing's office, where Eisenhower had been detailed to assist Pershing on the Battle Monuments Commission. Harding and Stayer were destined to serve as major generals in World War II; Stilwell's, Bradley's and Eisenhower's careers need little amplification here.

Two other officers who caught Marshall's eye prior to the war were George S. Patton and Terry de la Mesa Allen. Marshall had known both men well from World War I. Neither met Marshall's normal criteria for senior command, but the Chief of Staff made exceptions in their cases. Marshall felt strongly, according to Pogue, that "Patton's love of violence, his needless profanity and obscenity, and his gaudy showmanship were all serious defects in a commander." Yet he saw behind Patton's "adolescent caperings the skill of a professional, who added to years of training a natural talent for fighting and the ability to make men go beyond the limits of what they believed themselves capable of doing in battle." More than once during World War II, Marshall and his protégé, Eisenhower, saved the eccentric Patton from himself.

Like Patton, Marshall displayed a fondness for Allen, future commanding general of Marshall's World War I division, the 1st Infantry Division. A member of Marshall's instructional staff at Fort Benning, Allen was a fighter by nature, a trait that made him indispensable in battle but won him few friends in peacetime. Unfortunately, Allen displayed "a weakness as a disciplinarian and as a team player." After Patton relieved Allen of his command in Sicily, at the request of Bradley, Allen returned to the United States and was given another divisional command.

Working in the staff secretariat of the Secretary General Staff at the beginning of World War II were several additional Marshall protégés, including Bradley, Clark, Matthew B. Ridgway, Maxwell D. Taylor, J. Lawton Collins and Walter Bedell Smith. All were destined to hold senior command and staff positions in the war. Indeed, Marshall held up Bradley's promotion to corps command four times until Bradley straightened out the 28th Division. Once Bradley accomplished that task, Marshall sent him to join his classmate Eisenhower in North Africa. Shortly after he arrived in theater, Eisenhower assigned Bradley to command II Corps while Patton planned the invasion of Sicily.



MG Terry Allen



GEN Eisenhower and GEN Marshall

More than any other officer whose name entered Marshall's black book, Eisenhower constituted the preeminent "Marshall man." Marshall had been gathering information on Ike for years. MG Fox Conner, who headed Pershing's operations division in World War I, thought well of him. So did Pershing. As Pogue notes, another of Marshall's close acquaintances from the Great War, MAJ Ben F. Caffey, stationed in Manila, had written the Deputy Chief of Staff in 1939 from the Philippines: "LTC D.D. Eisenhower, Infantry, familiarly known as Ike, has been an especially brilliant member of the [Douglas MacArthur] mission. He is 'going places,' or I miss my guess." Small wonder that Marshall summoned Eisenhower to Washington in the immediate aftermath of Pearl Harbor.

Working for Marshall in the War Department was not always easy, as Eisenhower discovered when he reported for duty in the War Plans Division in December 1941. Ike quickly learned not to expect lavish praise. The best you could hope for, Ike recorded in his journal, was, "You are not doing so badly so far." But because Eisenhower performed so well, Marshall rewarded him with a more important job.

Even if an officer made it into Marshall's black book, there was no guarantee he would remain. "I'm going to put these men to the severest tests which I can devise in time of peace," Marshall confessed. "I'm going to start shifting them into jobs of greater responsibility than those they hold now. Then I'm going to change them, suddenly, without warning, to jobs even more burdensome and difficult. ... Those who stand up under the punishment will be pushed ahead. Those who fail are out at the first sign of faltering."

The Marshall Foundation: George C. Marshall Remembered

Secretary of Defense Robert M. Gates received the George C. Marshall Foundation Award "for a lifetime of distinguished service to his country" on October 16, the 50th anniversary of the death of General of the Army George C. Marshall, the Chief of Staff of the Army from 1939–1945. U.S. Secretary of State Hillary Rodham Clinton and U.S. Army Chief of Staff GEN George W. Casey Jr. delivered remarks at the ceremony. In his acceptance speech, Secretary Gates noted that during his long career Marshall held each of the posts the three now occupy.

"George Marshall is one of my personal heroes," said Secretary Gates.

"I invoke him as an example of the kind of leader everyone should aspire to be: the apotheosis of unshakeable loyalty combined with the courage and integrity to tell superiors things they didn't always want to hear—from General (Black Jack) Pershing to President Franklin D. Roosevelt."

The George C. Marshall Foundation and Virginia Military Institute (VMI), Marshall's alma mater, cohosted a seminar October 23–24 at the Center for Leadership and Ethics at VMI in Lexington, Va. Historian Mark Stoler, editor of the Marshall Papers, and former VMI superintendent Josiah Bunting, author of an upcoming book about Marshall, spoke at the symposium. Panelists discussed Marshall as a "Servant of the American Nation," weighing his roles as soldier, leader, peacemaker and diplomat.

The Marshall Foundation celebrates Marshall's legacy, offering educational programs, a museum, and a research library and archives to inspire new leaders.



DoD/Cherie Cullen

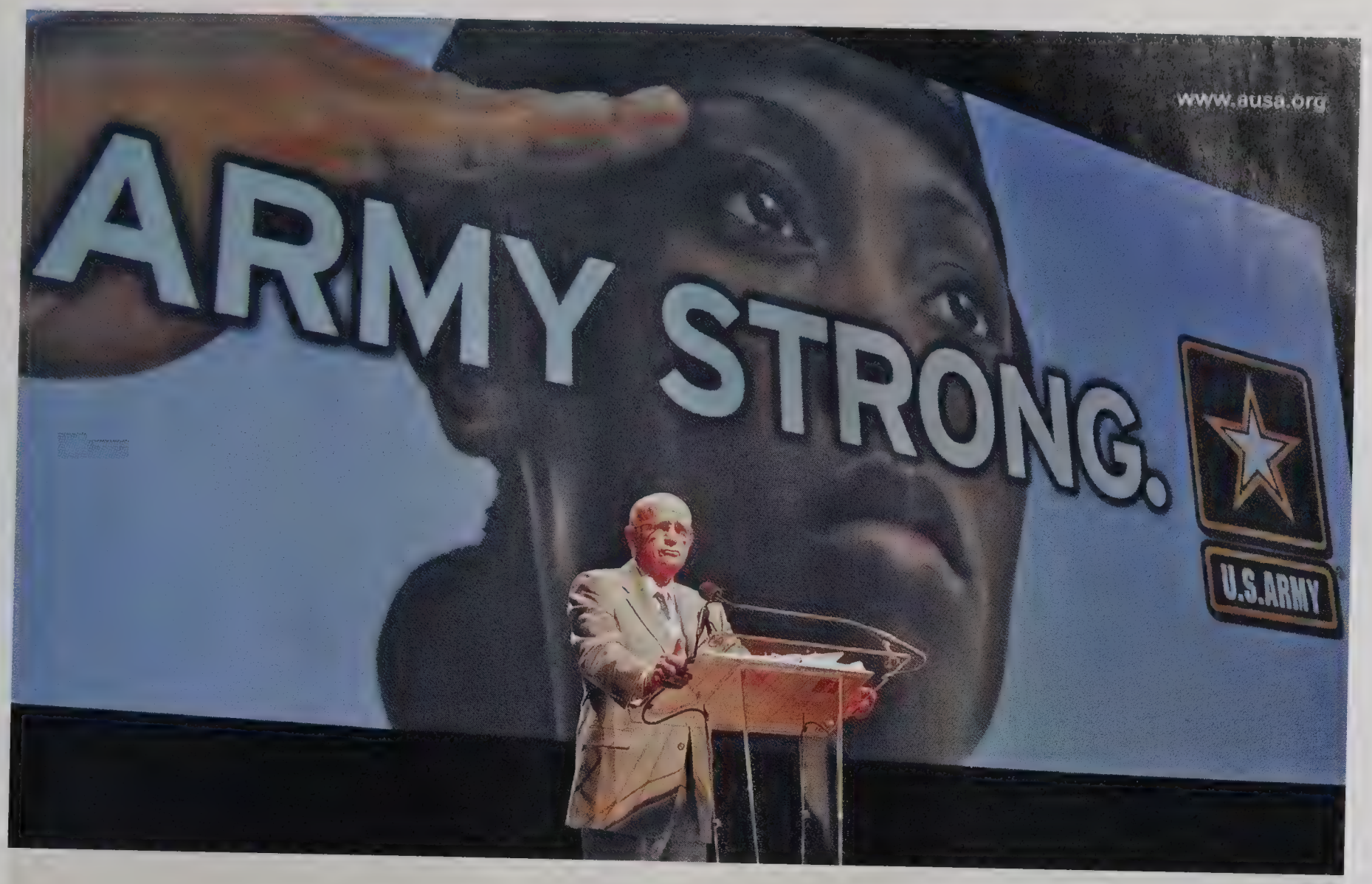
Retired U.S. Air Force Lt. Gen. Brent Scowcroft, left, a member of the George C. Marshall Foundation Council of Advisors, and Chairman of the Board John B. Adams Jr., right, present the George C. Marshall Foundation Award to Secretary of Defense Robert M. Gates.

For every officer who met Marshall's stringent standards, many more fell by the wayside. To understand why, one only needs to review Secretary of War Stimson's personal assessment of Marshall. On January 31, 1942, Stimson told Marshall that he had found that public figures fit into two classes: "first, those who are thinking primarily of what they can do for the job which they hold, and second, those who are thinking primarily of what the job can do for them." Marshall was "at the very top of my list of those I would place in the first category. … You are one of the most selfless public officials that I have ever known."



GEN Marshall with Secretary of War Henry L. Stimson.

Not surprisingly, those officers who vigorously advocated their personal advancement had no place in Marshall's Army. Take the case of LTG Hugh Drum, who had been one of Marshall's principal rivals for the position of Chief of Staff. Initially advanced by Stimson to head the "China Mission," Drum made it known that he preferred not to languish in the backwater of the war in a far-off theater. Tempers flared when Drum made his preferences known to Marshall, who told Drum in no uncertain



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Near right, GEN Marshall and LTG Patton; far right, General of the Army MacArthur

terms that in the present crisis every officer was expected to serve without regard to personal ambition.

As soon as Drum departed the office, Marshall conferred with the Secretary of War and recommended that Drum not be favorably considered for the China Mission. Consequently, Marshall nominated his personal choice, Stilwell, for the command, and Stilwell received the assignment. (Drum never saw active field service in World War II.) Not particularly happy with the decision, Stilwell replied, "I'll go where I'm sent." This was precisely the selflessness that the Army Chief expected.

Even Patton, one of Marshall's oldest friends, discovered that his close relationship with the Army Chief of Staff only went so far. As Marshall recollected to Pogue, one of Patton's colonels had written some "sharp criticisms of the War Department, wholly unjustifiable." Marshall knew Patton had encouraged the colonel to do so. Later, when Marshall toured the battlefront, Patton asked Marshall to promote the colonel. Marshall refused the request.

When Patton pressed the matter over dinner, Marshall told him, "This is not the time to bring this up. This is a social gathering, not a business meeting. I am speaking now as the Chief of Staff to GEN Patton and not to my friend, GEN Patton. You have encouraged the colonel in his attacks, and you have destroyed him. I will not promote him. Never mention it to me again." Patton prudently dropped the issue.

Nor was Patton the only senior commander with whom Marshall had occasional trouble. MacArthur was a special case. Having already served five years as Chief of Staff from 1930–35, MacArthur remained convinced that Marshall and his deputy, Eisenhower, had scuttled his Philippine command in early 1942 by not rushing supplies and reinforcements to his beleaguered soldiers on Bataan. Marshall did all within his power to relieve the starving force, but considering the logistical constraints placed on the Army during the first months of the war, it was an impossible task. Yet it was Marshall who wrote the recommendation for MacArthur's Medal of Honor.

While some members of the War Department's staff seemed reluctant to get tough with senior officers in the field, a referral of the matter to the Chief of Staff usually settled the issue. Marshall wrote to some, stating exactly what he thought, and indicated that this was the last time he intended to get personally involved in the matter.

Such was the case with LTG Walter Krueger, the commander of Sixth Army. Of all the senior generals "of the line" at the time Marshall became Chief of Staff, only Krueger received army-level command during World War II. Krueger often proved "difficult unless he got his way," Marshall reminisced. Krueger didn't want any National Guard troops assigned to his command. Marshall told him he would have to take his share, and that was final. Marshall then directed that all copies of this type of correspondence be destroyed.

In contrast to his dealings with MacArthur, Marshall appeared almost paternal in his response to Eisenhower's requests for the European Theater. "You list your final desires, and so far as I can see now, they will be approved," Marshall informed the newly appointed Supreme Commander in early 1944. Here again, Marshall's support had its limits. For the upcoming invasion of France, Ike requested all the proven commanders who had distinguished themselves in North Africa and Sicily. Eisenhower particularly desired MG Lucian K. Truscott Jr., who had commanded the 3rd Infantry Division in Sicily. Marshall





GEN Krueger, left, and, above, GEN Eisenhower and GEN Marshall.

drew the line, informing Ike that the Mediterranean Theater required seasoned commanders as well. He gave Eisenhower most, but not all, of the officers he had requested.

Given the manner in which he weeded out many high-ranking officers, Marshall enjoyed his share of detractors. Those officers placed on the retired list were especially critical. Equally bitter, notes historian Eric Larrabee, were the wives of those officers, often long-acquainted with Marshall, whom he refused to promote or place in positions of command. "[Marshall] was once our dear friend," one wife wrote to Pogue, "but he ruined my husband." Other observers criticized the Chief for creating an old-boy network, where only those who had incurred Marshall's favor during the Fort Benning years were destined to command troops in combat. Some accused Marshall of forcibly retiring "the brains of the Army," referring to his reliance on youth.

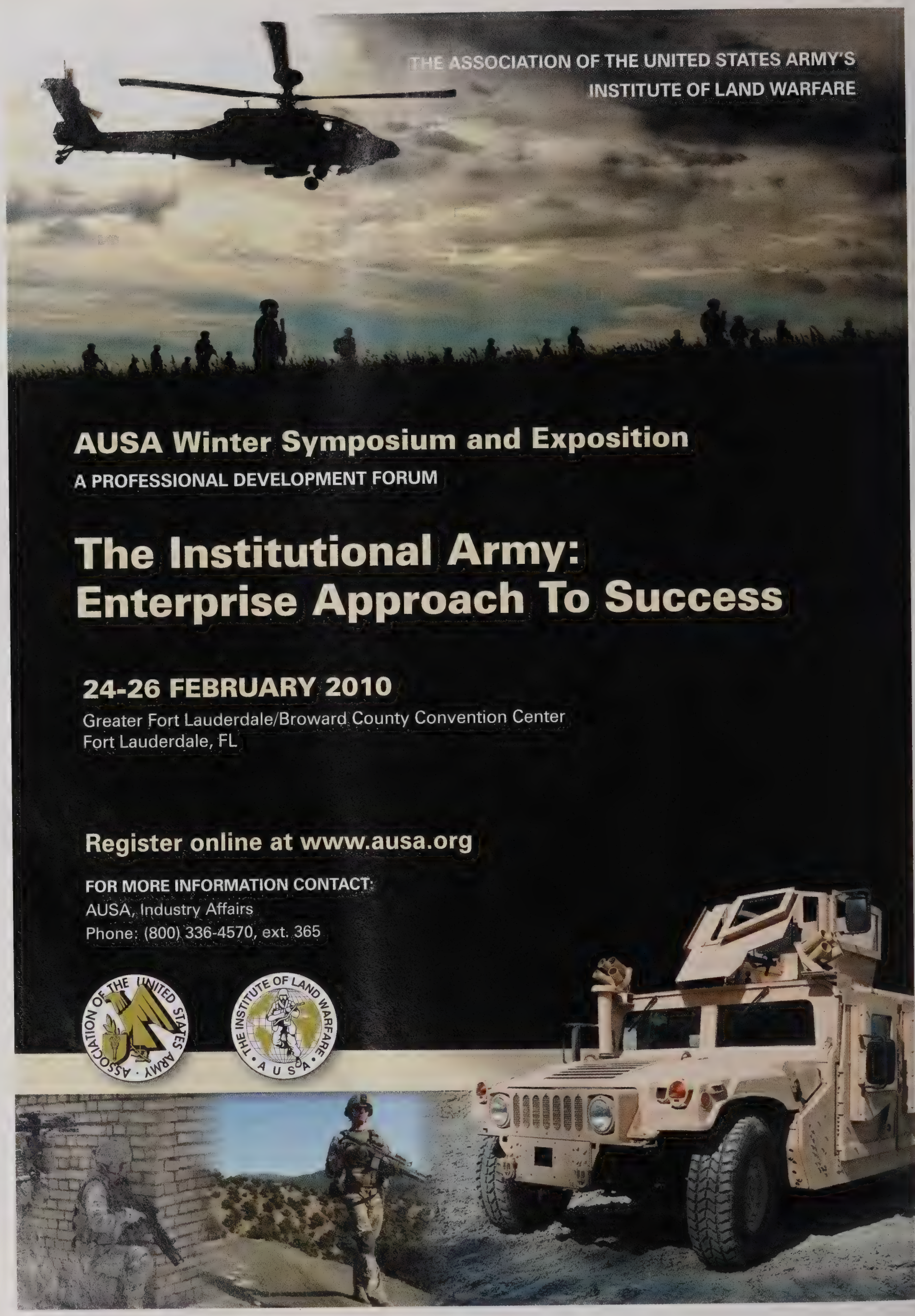
Others, writes Pogue, claimed that Marshall "didn't always pick good men, that he formed quick impressions, made snap judgments and sometimes serious mistakes." COL James A. Van Fleet, Ike and Bradley's classmate from West Point, is a case in point. Van Fleet was an excellent officer whose promotion Marshall delayed, confusing him with another officer whose name sounded similar and who wasn't as good. When the mix-up was straightened out, Van Fleet moved up fast. He was an exception to the rule, however. By any standard of excellence, Marshall was right far more times than he was wrong in his assessment of commanders.

By his own admission, Marshall's most serious mistake was in the mobilization of African-American units. In retrospect, Marshall felt that he should have kept the mobilization camps in the northern sections of the country. Instead, he moved these men and their units into the South, where they encountered prejudices "utterly beyond our control." Such prejudices "violently excited the blacks from the North who were unaccustomed to such matters of segregation as they found in the South, particularly in the very small towns." It was one of Marshall's few misjudgments.

Ever attuned to history's judgment, Marshall remained reluctant to comment on the efficiency of officers whom he had personally selected for senior wartime command. "I am not going to do this," he told Pogue. "I think if anything like this got into the book [Pogue's four-volume biography of Marshall] in any way ... all the attention would go to that and all the acrimonious debate would go to that, and nothing to the really important part of the text. I don't think it would be quite fair because the officer would have no chance to answer it at all."

In the final analysis, Marshall's control over the promotion and retirement of Regular Army officers created a body of commanders and staff officers who led the U.S. Army to victory in the most devastating conflict in history. Collectively, this cadre of officers constituted the most formidable array of warriors in our nation's history. More than any other officer, Marshall modernized the American Army.

Eisenhower, who proved to be Marshall's most able subordinate, gets the final word. Writing to Marshall on the eve of the termination of the European war, Eisenhower cabled, "I think you should make a visit here at the earliest possible moment while we are conducting a general offensive. You would be proud of the Army you have produced. ... You would be struck by the 'veteran' quality of the whole organization. ... You could see, in visible form, the fruits of much of your work over the past five years." ★


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COIN

The USA/USMC Counterinsurgency Center:

Preparing the Force for Counterinsurgency, Stability Operations and Security Force Assistance

A quick look at U.S. military history reveals that the American armed forces have been involved in counterinsurgency (COIN), stability operations (SO) and security force assistance (SFA) since the earliest days of the nation. Unfortunately, too often the U.S. government and U.S. military have failed to institutionalize lessons learned from such operations and have forsworn long-term commitments to develop the capacity to conduct those operations on a moment's notice. Indeed, conflicts in Iraq and Afghanistan have required that the Army relearn and readapt to operations in irregular environments.

Secretary of Defense Robert Gates has stated that we must balance "between institutionalizing capabilities such as counterinsurgency and … maintaining the United States' existing conventional and strategic technological edge against other military forces." Achieving this balance involves proficiency in COIN, SO and SFA. To assist with preparing the force for those missions, in 2006 the commanding general (CG) of the Combined Arms Center and Fort Leavenworth, Kan., then-LTG David H. Petraeus, and the CG, Marine Corps Combat Development Command, then-Lt. Gen. James Mattis, established the U.S. Army (USA)/U.S. Marine Corps (USMC) Counterinsurgency Center at Fort Leavenworth.

By COL Daniel S. Roper

Preparing for Complex Operations

To improve U.S. ground forces' capability to operate in a full spectrum/COIN environment, the COIN Center operates across six lines of effort: integrate COIN initiatives, research best practices, improve doctrine, improve education, advise leaders and organizations, and conduct outreach to other military and civilian entities.

Integrate COIN initiatives. Monthly integration meetings include representatives from the Iraq COIN and Security Operations Center and Afghanistan COIN Center of Excellence, foreign militaries, academia and the interagency community. A monthly COIN situation report serves as a vehicle to establish and maintain a common operating picture for the COIN community of interest. It provides updates on COIN initiatives, significant events and important publications and activities.

Research best practices. The COIN Center's online publication, the *Colloquium,* features authors of original COIN-related papers. The publication also provides information on the latest COIN-related research published in both military and nonmilitary professional journals.



Improve doctrine. COIN Center personnel participate in doctrinal working groups and provide detailed input to COIN-related publications.

Improve education. In 2008, the COIN Center presented COIN leader workshops and COIN fundamentals instruction to more than 1,000 soldiers, sailors, airmen, marines and individuals from NATO allies. The COIN Center coordinates and collaborates with other institutions that address counterinsurgency issues (for example, senior service colleges, theater COIN academies, schools and centers) to ensure consistency of doctrine, training and education.

Advise leaders and organizations. COIN Center personnel have met with representatives from Iraq, Afghanistan, the United Kingdom, France, Germany, the Netherlands, Canada and Poland—both in the continental United States and abroad—to address immediate concerns, to suggest possible solutions based upon lessons learned from others who have faced similar issues, and to facilitate coordination among joint, interagency, intergovernmental and multinational (JIIM) officials to solve common problems.

Conduct outreach to military and civilian entities. The COIN Center leadership briefs foreign and U.S. military and civilian leadership to strengthen interagency and multinational COIN linkages. The COIN Center also hosts COIN "virtual brown bags," an online speaker series with prominent speakers from the COIN community. In addition, the COIN Center web site (https://coin.army.mil) serves as a COIN knowledge gateway that is updated daily.

COL Daniel S. Roper *is director of the U.S. Army and Marine Corps Counterinsurgency Center at Fort Leavenworth, Kan. He has served on the Army and Joint Staffs and on the staff of the Coalition Forces Land Component Command in Operation Iraqi Freedom.*

SO/SFA Proponent Offices

COIN Center efforts to help the force learn and adapt are not limited to COIN. In January 2009, the commander, Combined Arms Center, was designated the Army Force Modernization Proponent for SO and SFA.

Although their primary focus is currently on establishing the initial operating capability and concept plan, SO and SFA staff have begun to identify current efforts and initiatives as well as SO and SFA gaps and associated requirements. The current SO and SFA lines of effort are: assess, communicate, and integrate and assist.

Assess. The SO and SFA proponent offices are conducting initial coordination with all Army training organizations to gather information on programs of instruction (POIs) for the training glide path in the Army force generation process. The offices then will assess how well the POIs reflect current doctrine and address current issues.

Communicate. The SO and SFA proponent offices host monthly integration meetings, chair a biweekly "brigade-augmented for SFA" meeting, and conduct multiple video teleconferences with the Peacekeeping and Stability Operations Institute, Special Operations Command, the Joint Center for International Security Force Assistance and Army G-3/5/7. The offices release a monthly situation report that provides updates on proponency initiatives, significant SO and SFA events, and important publications and activities across SO and SFA doctrine, organization, training, materiel, leadership, personnel and facilities (DOTMLPF) domains.

Integrate and assist. Future actions include integrating SO and SFA DOTMLPF actions into Army force management efforts and providing direct assistance in the implementation of these actions. The aim of these efforts is to serve as the Army's JIIM focal point for SO and SFA initiatives.

Preparing for a Balanced Approach

Operations in Afghanistan and Iraq have caused civilian and military leaders to recognize the limitations imposed on conventional forces by unconventional fighters. In early May, Michèle Flournoy, Under Secretary of Defense for Policy, stated that "preparing for this [future] operating environment will pull the Army, and the military writ large, in two very different directions" and that America's conventional dominance gives incentive to its enemies to use asymmetric means to undermine U.S. strengths and exploit its weaknesses. Success against asymmetric threats will rest heavily on the nation's ability to institutionalize, in doctrine, the knowledge that the force has gained in complex operations in Iraq and Afghanistan. The USA/USMC COIN Center and U.S. Army SO and SFA proponent offices are playing a critical role in preparing for a balanced approach to future contingencies.

To add your name to the COIN/SO/SFA distribution list; to participate in integration meetings, virtual brown bags or leader seminars; or to receive feeds from the COIN blog through our RSS feeder, visit https://coin.army.mil. ★

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Lessons from Task Force Currahee

Company commanders from Task Force Currahee—4th Brigade, 101st Airborne Division (Air Assault)—share some of their hard-earned lessons learned and insights gained from their experience in Afghanistan, March 2008–March 2009. "We see this process of sharing our knowledge as an integral part of the profession—continuously learning and adapting in order to be the most effective leaders that we can be."

Dave Lamborn

A/2-506 Infantry

The primary objective of counterinsurgency is to be in control of the population, which includes protecting the people. If the enemy is able to kill or credibly threaten to kill anyone who supports the government, then you will not be able to win the people's support. Most of this hard work will be in the form of reconnaissance and security patrols throughout your AO. Conduct patrols, share risks and maintain contact to obtain the intelligence to drive future operations and to reinforce connections with the people. Ultimately, securing the active support of the population will end the insurgency.

Intelligence is critical to conducting a counterinsurgency. However, if you continue to gather census data, do R&S patrols, set up observation posts, listen to SIGINT and use UAVs but don't have smart people analyzing the intelligence, then it will do you no good. You simply must have a company-level intel team that is crunching this data and constantly thinking about how to separate the enemy from the population and/or bring the population closer to the government. Good analysis will help you identify who the bad people or groups are and what sort of projects or actions will have the most positive impact on the population.



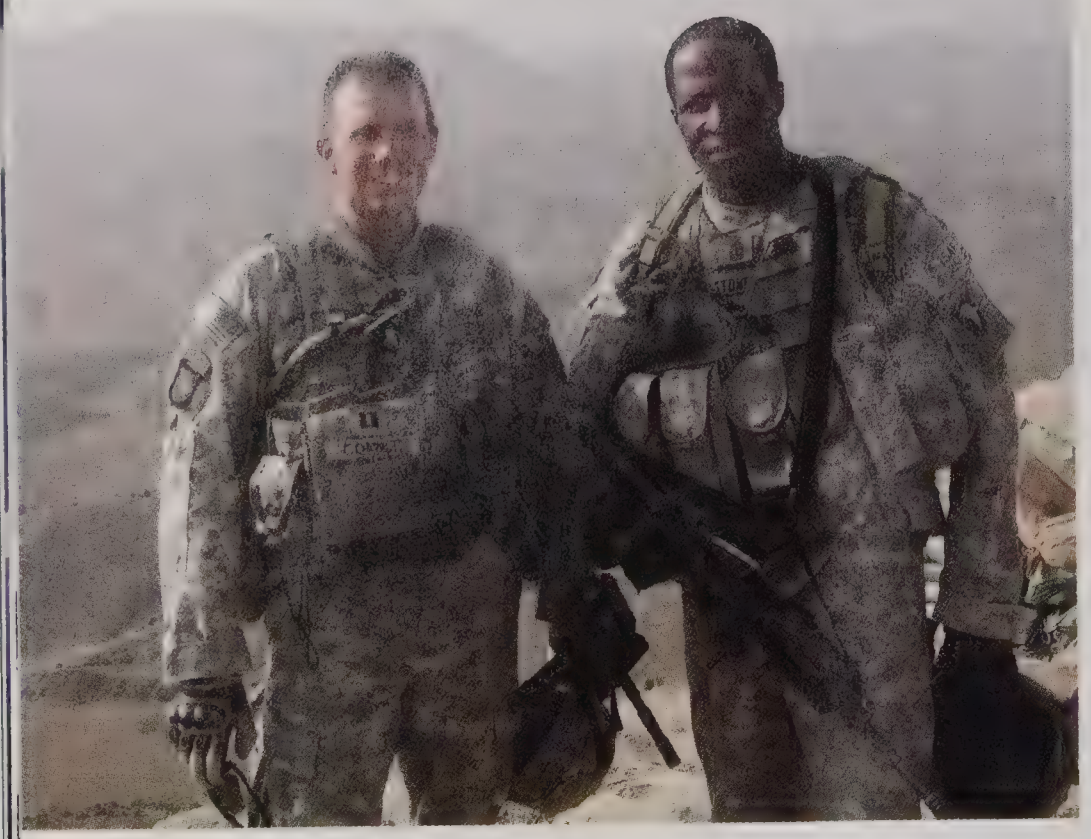
CPT Dave Lamborn breaks bread with local Afghan leaders. Bringing "the population closer to the government" is essential in counterinsurgency, he says.

David Conner

B/2-506 Infantry

Know the culture of the area you are responsible for, and understand that it may be completely different from that of your brother commanders. Ask yourself questions such as: Who is really in charge? Who are the real power players? Where are the real sources of conflict between the people in your area? What do they value? Take some time to figure this out. You can then use this information to shape your themes, messages and operations to meet your end state much more effectively.

We were trying to get a local government center built. Everyone seemed to want it, and it was consistent with the commander's intent along the government line of operation. It took us a while to figure out what the problem was, but we determined it to be one elder who worked behind the scenes to undermine our efforts. We needed to engage him directly, figure out what he valued and convince him—through our Afghan partners—why it was in his interest to support the government center. He had many ties to Pakistan and was concerned that supporting an Afghan district center would jeopardize his business dealings across the border. We laid out how the government center would eventually anchor a new business center and would insist that the general contractor hire subs from the local villages. This reassured the elder, who then took the risk and supported the project. Do



CPT David Conner and 1SG Roosevelt Whetstone pause for a moment before continuing inspection of an observation post that overlooks critical avenues of approach from Pakistan.

not assume the people will follow logic based on your values. Before you share your ideas, first try to understand how they view the world.

Mike Eliassen
HHC & C/1-506 Infantry

The Soldiers in our unit who put the time into developing relationships with the locals, NGOs and other players in our operational environment were a large part of our success. Those who did not see the Afghans as humans were generally a hindrance. Develop relationships with the idea that they are going to be lifelong. Our battalion commander knew one of the Afghan National Army colonels we worked with from his tour in 2004–05. This was an excellent professional relationship that set both units up for success.

We used a simple but effective pocket card that explained that our key task was to win the tug-of-war with the Taliban and the people. The GIRoA and the Taliban offer competing visions of the future, and it was our job to help the people move toward the government's. That the majority of the Soldiers in the company could explain this made a huge difference in understanding the long-term goals of the battalion and Coalition forces in Afghanistan.

Our medics—and Soldiers in general—were amazing when it came to treating civilian casualties. What made the difference with the younger Soldiers was the Eagle First Responder course that we had every Soldier complete prior to deploying. What I would add to our program would be a more comprehensive EMT program. This emphasis on medical training will make a difference not just with combat medicine, but with everyday emergency treatment as well. Since the population is the center of gravity in a counterinsurgency, this medical capability greatly increases the likelihood for overall success.

Physical endurance is the key to success in combat, especially in Afghanistan, where the demands of terrain and weather cannot be overstated. The effects of heat and altitude combined made a mockery of normal levels of physical fitness.

As far as professional reading is concerned, Sarah Chayes' *The Punishment of Virtue* and Greg Mortenson's *Three Cups of Tea* are two great, off-the-beaten-path books to read. Our battalion invited Sarah Chayes to talk with the leadership down to the platoon-sergeant and squad-leader levels prior to the deployment, and I firmly believe that hearing other points of view on the way the people view the war made a significant difference in our deployment. Of course, a chapter of doctrine a day is the best form of professional development when nothing else jumps out at you.

James Bithorn
A/1-506 Infantry

My greatest challenge in Afghanistan was balancing lethal and nonlethal targeting. As much as I wanted to focus on governance and economic development, I was consistently drawn back into security, primarily kinetic operations.

Over time, we developed an effective targeting process that included three targeting meetings during the course of a two-week period. The first meeting would include my HUMINT collection team, the platoon leaders and my company intelligence support team. The platoon leaders nominated targets in accordance with the ASCOPE methodology (targeting areas, structures, capabilities, organizations, people and events) within each platoon operating environment. If possible, I would also use this event to gather platoon leaders individually for a 24-hour period to level the playing field in terms of their current understanding of their commander's intent and how they saw their district developing.

The second targeting meeting was focused on lethal targeting and would include my partnered ODA, HCT and CoIST. Here we hashed out what the current trends were as well as nominations for feasible, time-sensitive targets.

The third and final targeting meeting was more of an intelligence-sharing session between my CoIST, the Afghan National Army and police intelligence sections, the Afghan CID (more police investigators than anything else) and Afghan NDS (the Afghan version of a combined CIA and FBI). We would utilize this session to validate certain HUMINT we had received, help focus and refine the ANSF efforts across the province, or simply maintain an understanding of the "ANSF intelligence picture."

Of course, it was difficult to keep this sort of battle rhythm up across the province, particularly when battalion or brigade missions took precedence. For the sake of continuity, the meetings would occur as regularly as possible, even when I could not be there. The most important meeting to keep consistent was the ANSF one, as it served several purposes, particularly in terms of development.

T. Sean Troyer
HHT/1-61 CAV

The Afghan security forces are the main effort! As such, joint and combined operations are the standard in OEF. Local police, border police and the national army will play a



Sean Troyer says that Afghan border police are the most important force influencing his operating environment.

major role in your mission and will affect your lines of operation. Personally, I believe the ABP are the most important force in the ANSF structure. If you own battlespace that includes a portion of the Pakistan border, I recommend conducting internal ABP immersion training to decrease the amount of smuggling, especially arms and personnel. Also, the local tribes along the border will have a strong sense of ownership and responsibility of the border and, in my case, were personally involved in border disputes. You must gain local/tribal leader buy-in concerning border issues, or you will make no effective progress.

I recommend finding out who at your brigade HQs has staff proponency on Afghan security forces (most likely the PMO cell). They can help you understand the big picture and fill you in on any issues that they are aware of in your task force AO. They can also provide manning, equipping and resourcing data that will enable you to more effectively work with and incorporate the Afghan forces into your planning process.

Spencer Wallace
B/1-506 Infantry

Relationships with the people are a prerequisite to successful operations. The desired end state for Giro District was developing an Afghan National Police platoon to the point where they were capable of executing successful counterinsurgency operations. Given this desired end state, 1st Platoon reevaluated the purpose and intent for operations as well as how to incorporate ANP into every facet of planning, execution and refit during six months at Forward Operating Base Giro. The platoon's leadership constantly focused the ANP on the people's needs as a means to build the trust necessary for COIN. After more than 15 *shuras,* delivering supplies necessary to reopen schools, fixing wells in the local bazaar and patching up the schools' windows, the people of Giro trusted the ANP and understood their commitment to improve the district. At this turning point, the ANP chief began receiving information on the enemy's movements, their intent for Giro and their residences from five separate sources. The culminating event for the police was building a plan based on such intelligence and moving to an objective to kill or capture a key Taliban leader. Along with 1st Platoon, the ANP killed four insurgents and wounded three, including the enemy leader. The results were no further harassing fire on the FOB, reports that the key leader fled to Pakistan for treatment, and the movement of all the shopkeepers in his home village to areas controlled by the ANP. The people trusted the ANP's ability to secure them.

Dan Westergaard
A/4-320 FAR

The most significant challenge I faced, and one I did not appreciate until I was on the ground, was logistically supporting operations in Afghanistan. As a Field Artillery battery commander, I had to get "into the weeds" with logistical support, especially when it came to getting my Soldiers the big bullets they needed to fire their howitzers on a daily basis. On any given day, one of my four firebases would fire several fire missions, often bringing them into critical resupply situations. The amount of time, effort, luck and perseverance that is required to ensure that big-bullet ammo was always ordered and delivered was incredible.

CompanyCommand Glossary of Terms

ABP—Afghan border police.
ANP—Afghan National Police.
ANSF—Afghan national security forces.
AO—Area of operations.
BCT—Brigade combat team.
CAS—Close air support.
COIN—Counterinsurgency.
CoIST—Company intelligence support team.
COP—Combat outpost.
EMT—Emergency medical technician.
FB—Firebase.
FOB—Forward operating base.
FSC—Forward support company.
GIRoA—Government of the Islamic Republic of Afghanistan.
HCT—Human intelligence collection team.
HUMINT—Human intelligence.
NDS—National Directorate of Security.
ODA—Operational detachment alpha.
OEF—Operation Enduring Freedom.
PMO—Provost marshal's office.
R&S patrols—Reconnaissance and security patrols.
SIGINT—Signals intelligence.
UAV—Unmanned aerial vehicle.

Seven Keys to Success

(1) Make developing your junior leaders a top priority. You will operate independently not only at the company-commander level, but down at the platoon level as well.

(2) Understand the importance of "commander's intent"; it must be nested from the brigade down to the squad. Understand it, and communicate it through every order and during every visit.

(3) Continuously study the weather, the physical and human terrain, and the enemy. Deep knowledge of these will allow you to "see" and "understand" the situation—and then to act effectively.

(4) Understand the basics in battle drills and physical/mental training. This terrain can break you physically and mentally, so train by executing the basics under physical and mental duress.

(5) Every operation, no matter your branch or specialty, is partnered with the Afghan national security forces. Company commanders will tell you that they had the capacity to partner during each operation at some level and in some manner. Organize your company that way. Accept risk as a commander, and partner with the Afghan forces.

(6) Your presence among your platoon and troops at the remotest of outposts, and your relentless energy in morale building, will maintain the necessary command climate, ethics and human dignity to do the hard right over the easy wrong. Fight for resources to visit your troops.

(7) Remain population-centric and in coordination with the Afghan national security forces, for here you will gain the cultural intelligence needed to help separate the enemy from the people and connect the Afghan government to its people.

Afghanistan is hard and unforgiving, but it is also the best place to be a company commander.

Shelia Matthews
E Co. (FSC), 1-506 Infantry

Echo Company (forward support company) performed its doctrinal mission. We conducted convoys to push and pull all classes of supplies organically without an escort from the line companies, attached cooks and mechanics to each forward location, and maintained fuel, water and ammo points. I learned how important it is to maintain technical expertise, while striving for tactical expertise, focusing on the basics: shoot, move and communicate.

Our technique during engagements with the enemy was to maintain contact until the enemy was dead or withdrew. Truck drivers must be capable drivers and mechanics, but they must also be capable gunners. Moreover, each truck commander must be proficient with all communication systems. The convoy commander must be able to effectively call for fire and communicate with CAS. I recommend that you



The 4th BCT Currahees, 506th Infantry, 101st Airborne Division (Air Assault), operated in Paktya, Paktika, Khost, Ghazni, Logar and Wardak Provinces from March 2008 to March 2009.

mount heavy weapons on maneuver and cargo trucks (we even put a turret and gun on our wrecker), and be prepared to provide security for all soft targets (some convoys secured up to 100 host-nation trucks). We also utilized a 60 mm mortar from one of the maneuver companies during extended convoys for enhanced firepower.

Danny Pedersen
A/4-320 FAR

One major insight is that junior leaders must be trained and prepared to operate within the commander's intent with little to no supervision. Terrain simply does not allow for commanders to oversee most operations. In other words, your leaders will have to "take the message to Garcia." As a battery commander, I had four platoons spread across four bases and personnel at two other FOBs. From Bagram Airfield, near Kabul, to FB Lilley in Shkin, Paktika Province, I was responsible for the operations and logistics of 114 personnel. Leaders have to be agile problem solvers. They have to be able to understand the commander's intent and make decisions within that framework without guidance from their higher HQ. This must be trained down to the squad- and team-leader levels.

Brendan McEvoy
A (Sapper)/4BSTB

Platoon leaders have a great deal more responsibility now than they did 10 years ago. Lieutenants are planning and executing their own missions and finding themselves in extremely challenging situations. When I was coming up, we told lieutenants to be with their Soldiers and to be doing what they were doing. That is fine, but it is not sufficient. Platoon leaders need to know that they have a bigger job than just executing the mission and having fun. They actually have to lead that platoon; in today's environment, that means a lot more work, including doing things that were previously done by company commanders.

Given the added responsibilities and decentralized na-

ture of the operation, it is critical that commanders very intentionally counsel, mentor and coach their platoon leaders. You will be busy, and this practice will fall by the wayside—unless you make it a priority. However, it is a "pay me now or pay me later" thing because the effectiveness of your company depends on it.

Tom Kilbride
C/1-61 CAV

Train all your leaders to be effective decision makers—to think, decide and act. We must teach our leaders how to think, not what to think. Each situation is different and requires the leader on scene to quickly gather the facts, identify the problem, process the information and determine a course of action. My subordinate leaders often had to step up to the next level of leadership and take charge when someone was injured, killed or simply not present.

We lost a total of seven Soldiers and several Afghan National Army soldiers during the deployment. Dealing with casualties is not something the schoolhouse teaches you; it is a terrible event that can either help build a cohesive company or destroy a company. Your soldiers will be scared and angry, which, in combination, can influence people to do things that will detract from the overall counterinsurgency mission. Your Soldiers must be the epitome of disciplined professionals during these trying times. Reinforce your standards and expectations, and make them live them. Soldiers in a good company will see their way through times like this. They will remember the sacrifices of the fallen and the living, which will strengthen their resolve and commitment to complete the mission in Afghanistan. Never let your Soldiers forget that.

Bruce Roett
A (Distro)/801 Brigade Support Battalion

In terms of the Army "be, know, do" leadership framework, I found that the "be" is particularly important in Afghanistan. Who your Soldiers are—and especially their personal courage and integrity—defines the character of your unit. The seven Army Values start and end with each individual Soldier, regardless of rank. I don't think there is any gray area or line in between when it comes to character and standards. This is especially important at the smaller combat outposts and firebases. Either standards exist and are enforced, or there are no signs of them. You will arrive by rotary wing and immediately see an orderly U.S. Army outpost, or you will see something directly out of the movie "Apocalypse Now." It is almost always one or the other.

I recommend doing "what if" sessions with your Soldiers over and over again and for every conceivable situation. What if this happens? What if Jones gets wounded? What if the wrecker breaks down here? Asking these questions at every level of leadership and during every phase of training events will spark some great discussions and will address issues and questions that can be solved in training so that when they happen in combat, it will not be the first time your Soldiers have encountered the problem. "What if" everything to death.



An A/2-506th Soldier befriends a boy during a mission to install a well that provided drinking water to his village.

This article is an excerpt from the Afghan Commander AAR Book, Currahee Edition*, which includes contributions from 19 company commanders in the 4th Brigade Combat Team, 101st Airborne Division (Air Assault). We want to thank the contributors along with COL Pete Johnson and LTC Dan Morgan—the BCT commander and S-3—for making a lasting contribution to those who are preparing to deploy to Afghanistan now. Members of the PlatoonLeader (http://PL.army.mil) and CompanyCommand (http://CC.army.mil) professional forums have access to the complete version in the Pro-Reading section of the online forum.*



AUSA Sustaining Member Profile

Energy Technologies, Inc.

Corporate Structure—Founded in 1992. General Manager/CEO: P.D. Madden, PE. Headquarters: 219 Park Avenue East, Mansfield, OH 44902-1845. Web site: www.TacticalPower.com.

Energy Technologies, Inc. (ETI) is a leading manufacturer of rugged, high-reliability power-conditioning, power-generation and computer products for the U.S. military and the industrial, medical and telecommunications sectors. ETI's products include: intelligent uninterruptible power systems (UPS) and power conditioners, vehicle inverters, portable generators, packaged power plants, fuel-cell power plants, flexible solar panels and solar charging systems, environmental control units, mobile computers, and mobile office systems.

While other vendors sell commercial-grade UPS systems or inverters, ETI designs its products to be rugged from the ground up for tactical applications. All of ETI's units can be manufactured to meet stringent military standards. Many of these units have already successfully passed the demanding Belgium Block and Munson Road tests, explosive charges in the Barge test, and other shock and vibration standards.



ETI's uninterruptible power systems and power conditioners are designed to provide highly reliable AC and DC power worldwide. These units can operate from any in-country AC power grid, generator or aircraft regardless of voltages or frequencies, as well as from any vehicular, aircraft or solar DC power grid.

ETI also integrates products into complete packaged systems, saving setup time, maintenance and space. For example, the Tactical Power Plant® combines a UPS, generator, advanced turbine system and power distribution unit into rugged, readily deployable cases, providing emergency backup power, power generation and power conditioning in one package. ETI's tactical office systems combine into one foldout shipping container workspace with conditioned power, inverters, UPS and other computing options.

Many of ETI's product lines are now providing clean, renewable energy to warfighters in the field. Tactical Solar® panels generate power for mobile electric and battery-charging applications that require lightweight, flexible, durable and silent power. These systems are integrated into portable cases combining chargers, inverters and/or batteries with the solar panels. Tents and shelters can be covered in lightweight, rugged solar panels and integrated with controllers that generate "free" power without making noise or requiring fuel. In addition, ETI is developing systems that utilize small-scale, portable, helix wind-turbine generators, which can be rapidly assembled in the field and provide silent power to remote command centers.

ETI is currently developing nickel metal hydride-based fuel-cell systems. These will provide clean, silent power that will replace engine generators for military use. Development of this innovative technology has been aided by $2 million in grants from the Ohio Third Frontier fuel-cell initiative. These fuel cells generate power using low-pressure hydrogen, which will be refueled by a hydrogen fuel reformer, a second module that converts biomass into usable hydrogen to recharge the hydrogen storage vessels.

These renewable energy technologies are culminating in the development of a "green" hybrid-powered command center that combines solar, wind and fuel-cell technologies, providing remote command centers power without reliance on noisy generators or fuel-supply logistics.

Each ETI product is also available in customer-specific configurations. Products configured for tactical applications are built directly into transit cases, offering mobility, ease of use and low maintenance. These tactical products are in service around the world in harsh environments, ranging from war zones in Iraq and Afghanistan to surveillance outposts along the United States' southern borders.

ETI products are currently used by the following deployed systems.

■ **JLTV** (joint light tactical vehicle) is a U.S. Army, U.S. Southern Command and U.S. Marine Corps program to replace the current Humvee with a family of more survivable vehicles with greater payload. ETI's watertight UPS acts as a buffer to the vehicle's DC power system.

■ **TTWCS** (tactical Tomahawk weapons control system) is a next-generation cruise-missile weapons-control system that enables ships to execute Tomahawk cruise-missile strikes. TTWCS systems incorporate multiple ETI uninterruptible power systems to back up the fire-control systems.

■ **THAADS** (theater high-altitude area defense system) fires a missile capable of intercepting and destroying shorter-range ballistic missiles in the upper atmosphere. ETI provides UPS backup power for the command modules controlling these missiles.

■ **WAAS** (wide area augmentation system) is a flight-navigation system developed for civil aviation by the Federal Aviation Administration to augment global positioning system (GPS) data and provide additional accuracy, integrity and availability for airports. A network of ground stations located throughout North America monitors and measures the GPS signals and coordinates with satellites. Each ground station incorporates three ETI uninterruptible power systems.

■ **SSDS** (ship self-defense system) is a combat system that integrates and coordinates all of the existing sensors and weapons systems aboard a ship, including its Phalanx close-in weapon system. ETI's uninterruptible power systems back up the power coordinating this system.

■ **F35 CATBird**: These modified 737s recreate the instrumentation of the F-35 fighters to monitor their status. ETI provides the only 60-Hertz backup on these aircraft.

■ **Wind turbines** provide electrical power across the country. ETI provides backup power to the turbine operations with special hostile-environment UPS that operate between minus 40 degrees Celsius and 60 degrees Celsius in the base of each tower.

With a customer-centered approach to product development and a dedication to enhancing reliability and functionality with evolving technologies, Energy Technologies, Inc., is prepared for the power needs of today and tomorrow.

Soldier Armed

Joint Air-to-Ground Missile (JAGM)

By Scott R. Gourley

The joint air-to-ground missile (JAGM) is being developed as the next-generation air-to-ground missile to replace Hellfire, TOW 2A and Maverick missiles on fixed-wing, rotary-wing and unmanned aerial vehicle (UAV) aircraft. Two competing industry teams will soon be conducting preliminary design reviews for their JAGM designs. The Army-led joint service program will deliver an extended-range, precision-guided weapon that provides lock-on-before-launch and lock-on-after-launch with precision point, target and fire-and-forget capabilities against both fixed and moving targets. It will be effectively employed day or night in obscured battlefield, adverse weather and countermeasure-rich environments.

Measuring roughly 70 inches in length with a 7-inch diameter, the 108-pound JAGM will feature ranges of approximately 500–16,000 meters for rotary-wing aircraft and 2,000–28,000 meters for fixed-wing platforms.

The six threshold combat platforms initially projected for JAGM application include the Navy's F/A-18E/F Super Hornet and MH-60R Seahawk; the Marine Corps' AH-1Z Super Cobra; and the Army's AH-64D Apache Longbow, Sky Warrior Extended Range Multi-Purpose (ERMP) UAV and ARH-70A Armed Reconnaissance Helicopter.

JAGM incorporates numerous lessons learned from the previous AGM-169 joint common missile (JCM) program (terminated in 2005 due to funding pressures). It passed a significant milestone in September 2008, when the Program Executive Office, Missiles and Space awarded technology development (TD) contracts to two competing teams, Raytheon-Boeing and Lockheed Martin. The 27-month TD phase includes preliminary design and integration, and culminates with flights of the contractor teams' prototype missiles.

Raytheon–Boeing Team

"JAGM is probably the last major missile program for the next quarter-century," said Mike Riley, Raytheon's business-development lead for JAGM. "By the time JAGM goes to IOC [initial operating capability] in 2016 and retires Hellfire—which was fielded in 1984—you're talking about a very long period of time. We anticipate that this is going to be an equally long, if not longer, running program.

"The whole genesis is that it's a 'system solution' rather than a 'missile solution.' The platforms that the missile is going to go on have all kinds of capabilities themselves. As examples, the F/A-18E/F and Apache Longbow are both very technically developed systems with great capabilities, and you don't need a very extensive and 'talented' missile to take advantage of those capabilities. That makes this program unique—the Raytheon and Boeing team have made the 'system solution' the key to this whole program."

Steve Sherrick, who leads JAGM business development for the Boeing side of the team, reflected on some of the tactical capabilities of the JAGM design. "JAGM is going to go 16 kilometers from rotorcraft while Hellfire only goes 8 kilometers," he explained. "That doubles the range. Another improvement involves the warhead. Hellfire has a whole bunch of warheads on it [different models] for blast/fragmentation and main battle tanks, but the JAGM warhead will be able to do both—it will be able to do main battle tanks as well as hardened brick-over-block targets."

Concerning existing missiles with millimeter wave and semi-active laser capabilities, Riley emphasized the integrated nature of the Raytheon-Boeing trimode seeker design. "No missile out there has an imaging infrared capability," he said. "When you add all three together, a lot of people assume that you just have three separate seekers that are acting independently. What we have is three systems acting as one seeker with a totally integrated



Lockheed Martin

The joint air-to-ground missile (JAGM) will replace three legacy missiles—Hellfire, TOW 2A and Maverick—on fixed-wing and rotary-wing aircraft as well as unmanned aerial vehicles.

JAGM allows for a common design at low cost, with components that can be optimized for mission requirements and all types of modern aviation platforms.



Raytheon-Boeing

picture. In other words, the imaging infrared, the millimeter wave and the semi-active laser are all 'talking' to each other in the seeker itself."

Lockheed Martin Team

Frank St. John, director of Close Combat Systems (including JAGM) at Lockheed Martin, also shared some thoughts on that team's seeker design efforts. "When we first looked at addressing this requirement several years back," he said, "one of the things that we wanted to do was take advantage of all of the experience that we had producing, fielding and supporting weapon systems like Javelin, Hellfire II and Longbow. Our seeker approach builds on the technology baselines of those programs and integrates them into a trimode sensor that is very powerful for providing capability to the warfighter. We didn't want to reinvent technology or take unnecessary risks if we didn't need to, so we've taken mature technical baselines from fielded weapon systems and integrated them into a sensor package that will fully meet the requirements.

"Similarly, in terms of lethality, we have a long history of doing antiarmor systems as well as blast/fragmentation lethality systems and the fuzing associated with that, so we wanted to take those technology elements 'off the shelf'—integrate them in a solution that would meet the requirements of the program but not introduce a 'risky' technology that would take us down a path that was uncertain or costly," he said.

"For the JAGM program, we took where we left off on JCM and used that as a foundation to build on," St. John added. "Where appropriate, we have updated our design to address lessons learned from current fielding initiatives, lessons learned from testing in JCM and efforts to continue to reduce the cost baseline for the weapon system. When we finish here, we're going to have a single weapon that integrates onto all of those platforms and is fully compliant."

Key Lockheed Martin team partners include Aerojet (propulsion system) and Marvin Engineering (launchers).

"From my perspective, we have a very seasoned team in place," said Hady Mourad, JAGM program director for Lockheed Martin. "It has been around really since the beginning of JCM with the same team making the transition to JAGM. This team is ensuring that we have a product that meets all of the current requirements and allows us to seamlessly make the transition to the next phase—the engineering and manufacturing development (EMD) phase—which should be coming up in 2011."

"This is the weapon that warfighters have wanted for some time now," St. John said. "It's well within hand, and we are looking forward to providing it to the warfighter as quickly as possible."

With the program approximately halfway through its TD phase as of September, next year should witness an early preliminary design review, with delivery of six prototype missiles from each team. Those prototypes will be used in three flight tests that will verify the maturity of the competing designs. Industry teams are currently expecting those test shots to occur in late spring or early summer.

Knowledge gained from the recent flight tests, together with follow-on EMD phase proposals, will be used for down-selection and entry into the 48-month EMD phase.

The low-rate initial production phase is expected to begin in fiscal year 2015. ★

Reviews

Innovation in Warfare on the American Frontier

War on the Run: The Epic Story of Robert Rogers and the Conquest of America's First Frontier. *John F. Ross. Bantam Books. 576 pages; maps; black-and-white photographs and illustrations; index; $30.*

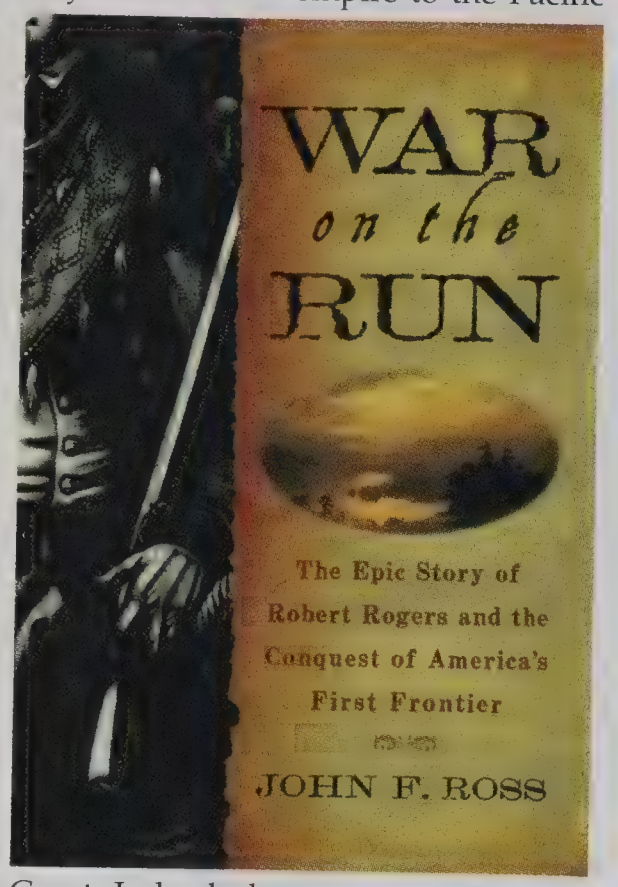
By COL Cole C. Kingseed
U.S. Army retired

Set against the backdrop of the French and Indian War, John F. Ross' *War on the Run* chronicles the extraordinary life of Robert Rogers, whose "rules of ranging" remain the guiding principles for today's U.S. Army Rangers. In this gripping biography, Ross opines that Rogers' greatest accomplishment as a leader was the ability of "this ultimate individualist to shape a group of Yankees into a unit defined by a collective mystique."

Writing more for the popular audience than the military professional, Ross has written numerous articles on exploration and adventure training. An avid explorer in his own right, Ross is executive editor of *American Heritage* magazine and a former senior editor at *Smithsonian* magazine. In researching *War on the Run*, Ross draws heavily on contemporary accounts, most notably Rogers' own *A Concise Account of North America* and *Journals of Major Robert Rogers.* Excellent maps and an appendix that outlines Rogers' standing orders greatly enhance the text.

The Rogers who emerges from these pages is a rugged individualist, naturally drawn to the wilderness by circumstances of birth. Hardened by years on the New England frontier, Rogers honed his skills in the wilderness war between France and Great Britain. His most notable feat was the raid on the Indian village at Saint-Francois in 1759, after which his trek across uncharted wilderness to escape the pursuing French-Canadians made Rogers' Rangers the stuff of instant legend.

By far the most intriguing section of *War on the Run* is Ross' account of Rogers' post-French and Indian War career. The year 1761 found Rogers in the Carolinas, participating in a successful effort to quell a Cherokee uprising. Now in contact with Royal Governor Arthur Dobbs, Rogers quickly fell under Dobbs's influence that the discovery of the fabled Northwest Passage would provide England the opportunity to extend its empire to the Pacific



Coast. Indeed, the concept of "finding the Northwest Passage by land would become Rogers' *idée fixe*, a plan grand enough to encompass his imperial, continental thinking."

Pontiac's Rebellion in 1763 temporarily sidelined Rogers' plan for exploration. Again English authorities commissioned Rogers to raise an independent company of Rangers. Rogers performed heroically in the defense of Fort Detroit, and his exploits were widely acclaimed on both sides of the Atlantic. After nine years of war, Rogers traveled to London in 1766, where he secured an audience with 27-year-old King George III. Simultaneously, Rogers received an appointment to command Fort Michilimackinac, the Crown's westernmost outpost in North America.

Returning to America, Rogers ran afoul of Gen. Thomas Gage, the British commander in chief in North America, and Indian Superintendent William Johnson, both jealous of the accolades that Rogers had recently received in London and both suspicious of Rogers' relations with the Indian tribes of the Great Lakes region. Gage, who proved a formidable opponent of Rogers in the coming decade, soon discovered that Rogers had received secret dispatches from Joseph Hopkins, late a Queen's Ranger from Maryland, now in the service of the French king. Hopkins had also served with Rogers against Pontiac at Detroit. The result, whether intended or not, cast Rogers as a traitor in Gage's and Johnson's eyes.

On December 6, 1767, Rogers was arrested and tried for treason for "holding Dangerous and Traiterous Conferences with His Majesty's Enemies." A year later, Rogers was acquitted of all charges, but his reputation was in shambles. Penniless, Rogers returned to London, where he spent two years in debtor's prison before returning to America just a few months after the onset of the American Revolution. His prospects were few, "save the brightly burning promise of the Northwest Passage."

Rogers' return to America proved a bitter homecoming; he found himself caught "in a strange netherworld, a place neither completely American nor altogether British." The fact that he remained a British officer on half-pay as a token reward for his military service during the recent war roused American suspicion, including that of newly appointed GEN George Washington. Alarmed by rumors of Rogers' travel from colony to colony, Washington instructed GEN John Sullivan of New Hampshire to interview Rogers and to determine his loyalties.

Sullivan's subsequent letter to Wash-

ington reinforced the commander's fears concerning Rogers' well-known split loyalties. Washington considered Rogers' movements consistent with and akin to those of a spy. Before long, Rogers was under arrest and confronted by Washington himself.

Ross' portrayal of the meeting between these two charismatic, boldly ambitious men is fascinating. Though only a year separated them in age, "no better example exists in 18th-century America to illustrate the importance of family standing, good luck and the ability to win friends in high places than the contrast between the unfolding fortunes of Washington and Rogers." The meeting with Washington sealed Rogers' fate, as Washington informed the Continental Congress that Rogers posed a dangerous threat to the American cause.

With little hope of gaining American sympathies, Rogers escaped his captors and immediately offered his services to the British. Rogers' subsequent service to British commander William Howe revealed his ultimate allegiance to the Crown. In the process, he engineered "the most significant counterintelligence coup of the entire war by unmasking the patriots' most celebrated spy," Nathan Hale. At war's end, Rogers returned to England where he died in 1795, far removed from the North American wilderness where he had gained fame.

Was Rogers as important to the country's development as Ross suggests? Perhaps, but Ross certainly exaggerates Rogers' legacy. Rogers was hardly the first to see "how a higher synthesis of Old and New World practices could create a new and formidable mode of warfare" in the American interior, and though Rogers' rules of ranging are highly prized by the Ranger School at Fort Benning, Ga., there exists scant evidence that Rogers is the godfather of modern special operations forces.

One wonders what would have been Rogers' fate had he not cast his fortunes with the British. Despite his many achievements in conquering America's first frontier, no monuments exist to commemorate Robert Rogers. *War on the Run* makes it clear why this is so.

***COL Cole C. Kingseed**, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.*

Good Story, Bad History

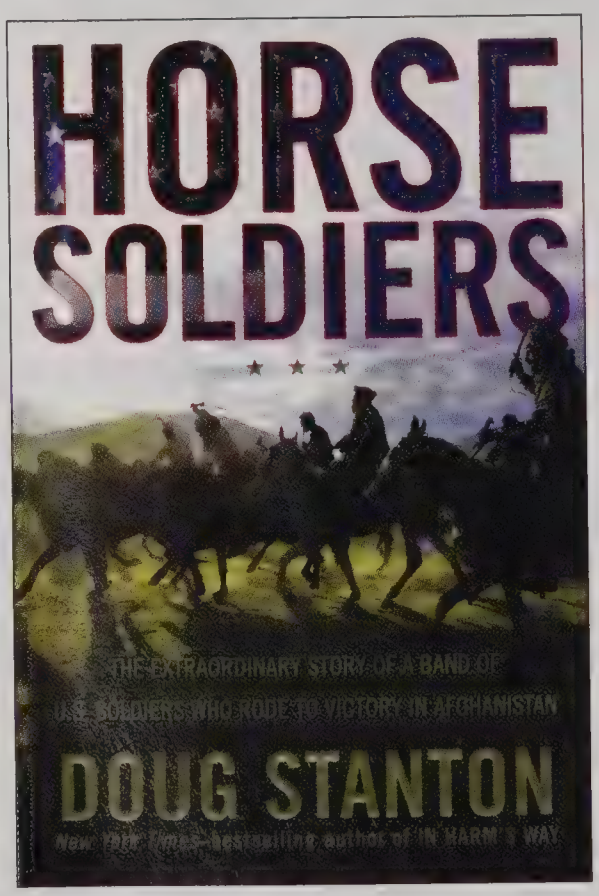
Horse Soldiers: The Extraordinary Story of a Band of U.S. Soldiers Who Rode to Victory in Afghanistan. *Doug Stanton. Scribner. 393 pages; maps; black-and-white photographs; $28.*

By COL Alfred H. Paddock Jr.
U.S. Army retired

After the September 11, 2001 al Qaeda attacks on the United States, this country responded by sending personnel from the CIA and Army Special Forces as the lead elements for war in Afghanistan. Their mission: to link up with forces from the Afghan Northern Alliance and assist them in destroying the Taliban with the help of American airpower.

Once Special Forces infiltrated over the mountains into Afghanistan via harrowing helicopter portages, they linked up with CIA operatives who provided the initial coordination with Northern Alliance commanders. To their surprise, Special Forces soldiers were forced to use horses for their operations—an unusual requirement for which they had not prepared. They did so, however, and all of the U.S. military, CIA and Air Force personnel involved demonstrated great courage and flexibility in accomplishing their mission while operating in mountainous terrain and dangerously harsh weather.

The durability and versatility of the basic Special Forces operational detachment was on display when they were often split into smaller cells to cover a larger area of operation. The expertise of the Special Forces medics was also demonstrated when one amputated the leg of a Northern Alliance soldier with the serrated 4-inch blade of a Leatherman tool.



Based on approximately 100 interviews, as well as written sources, Doug Stanton tells this story vividly in *Horse Soldiers*. He explains well the precise coordination with Air Force aircraft required to target their bombs and missiles against the Taliban, without which the Northern Alliance could not have prevailed. The desperate battle at the Qala-i-Janghi fortress, where some 600 Taliban soldiers escaped and broke into an extensive cache of weaponry, is particularly well described.

That said, *Horse Soldiers* raises a number of questions. Stanton's treatment of early Special Forces history is inadequate and inaccurate. Indeed, there are only a few paragraphs devoted to this subject, and apparently Stanton failed to consult some of the sources listed in his bibliography. For example: "The unit itself wasn't officially formed until 1952, as the First Special Forces Group." The first unit, formed in 1952, was the 10th Special Forces Group. The 1st Special Forces Group was not formed until later.

In addition, Stanton cites exploits of the 1st Special Service Force (1st SSF) as the forerunner to the original mission

of Special Forces: "Relishing their lethal craft of stealth and surprise, these World War II soldiers even nicknamed themselves the 'Devil's Brigade.'" The 1st SSF, while included in the lineage of Special Forces, was a commando-type organization that conducted operations similar to those of U.S. Army Rangers. The true forerunners of the 10th Special Forces Group, with its original mission of unconventional warfare—organizing and directing the activities of resistance forces—were the Jedburghs and operational groups (OGs) of the Office of Strategic Services (OSS), particularly the latter. The 15-man organization and individual personnel skills that characterized the OGs were quite similar to features of the original Special Forces operational detachment in 1952.

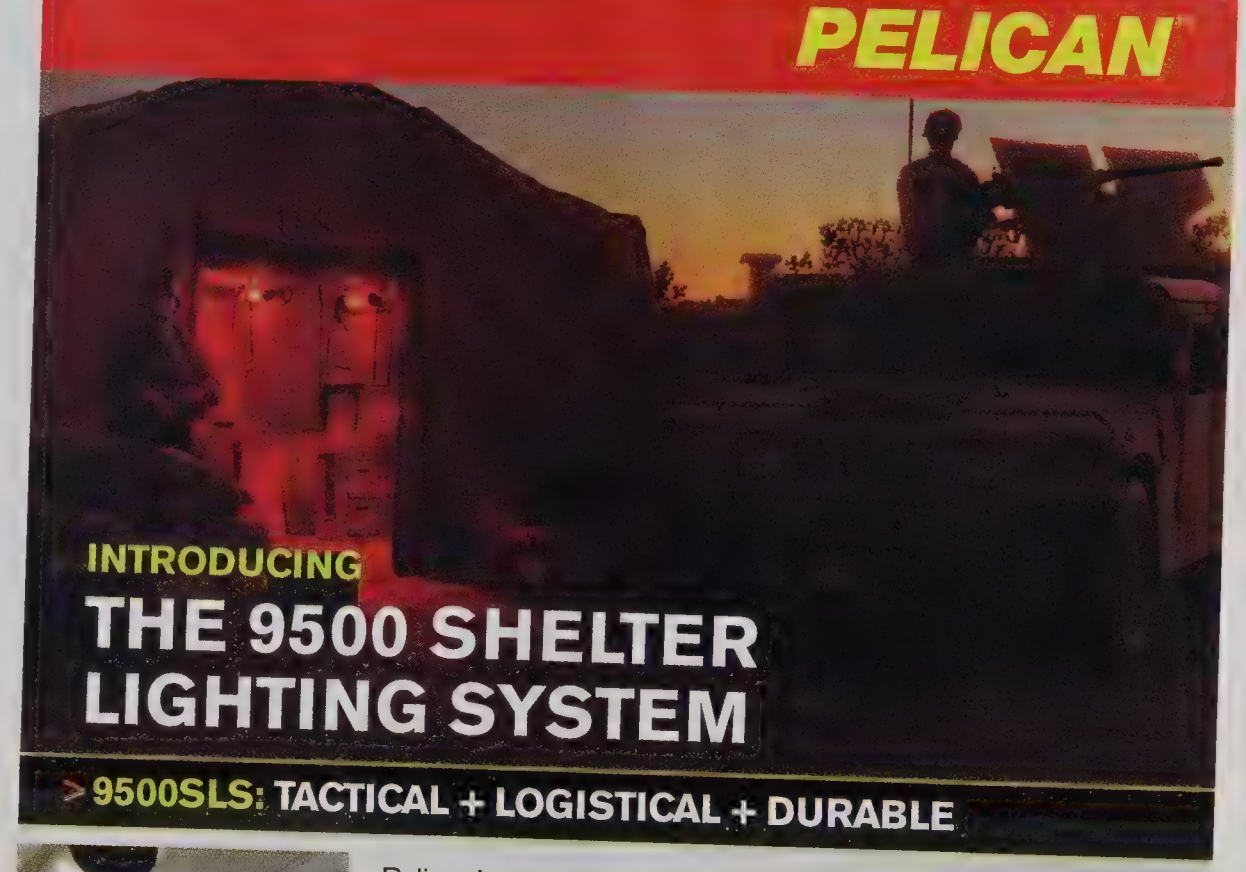
Two other historical inaccuracies should be noted. CIA paramilitary officers "were the heirs of the former Special Operations Group (SOG), developed during the Vietnam War. SOG itself was an outgrowth of the OSS, whose spies operated behind enemy lines during World War II, fighting with underground resistance groups." Wrong: The correct title of the SOG developed during the Vietnam War was the Studies and Observation Group, and the latter did not evolve from OSS's World War II unconventional warfare operations—it had its own unique history, organization and mission.

The reconnaissance elements of SOG consisted primarily of six- and 12-man teams, each with two or three Special Forces noncommissioned officers. They were backed up with indigenous reaction companies, led by Special Forces personnel. Helicopters "inserted" these teams into Laos and Cambodia and "extracted" them after completion of their missions (or earlier, if detected by the North Vietnamese army). These reconnaissance teams did not fight with "underground resistance groups." Indeed, SOG's efforts to develop resistance movements failed.

A particularly worrisome claim by Stanton is this: "During [the Vietnam War], the men of the Fifth Group [5th Special Forces Group] grew their hair, slept in hammocks, took native women as girlfriends, and lived and fought in the jungle far beyond the reach of anyone's official control. They had also committed some of the conflict's worst atrocities."

The latter assertion is unsubstantiated and outrageous. During my three tours with Special Forces in Laos and Vietnam—including one with SOG—I saw no atrocities committed by our soldiers, nor heard of any. Yes, some Special Forces operational detachments wore the dress of those indigenous minority groups with which they were working, but only if they thought that this would help them accomplish their mission. Most did not. Furthermore, a firm rule with most operational detachments was no fraternization with the native women, which would have undermined relationships with their indigenous force and with local officials. Neither am I aware of documentary evidence supporting such accusations, and Stanton does not cite any. In fact, *Horse Soldiers* does not contain a single footnote or endnote, and an index—usually ex-

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pected in nonfiction works—is not provided.

Another weakness is Stanton's liberal use of dialogue among the principal characters. The antennae of historians arise when they see this—they know that people cannot remember exactly what they or others said weeks, months or years earlier. That's why memoirs with extensive dialogue are read with large doses of salt. Nonetheless, half of *Horse Soldiers'* 360 pages contains spoken dialogue and, in many cases, extensive conversations. Stanton says that this dialogue is drawn in part from the "thoughts and words" of his "primary interviews" with both American and indigenous Afghan personnel. That's not good enough for nonfiction work.

Finally, the integration into Stanton's story of John Walker Lindh—the American who joined al Qaeda and was captured at the battle at Qala-i-Janghi fortress—is awkward. Passages devoted to him appear no less than eight times throughout the book, some of which begin with statements like, "So said the voice of God," and end with, "So ends the voice of God." Apparently these passages are intended to show the evolution of Lindh's conversion to Islam, but they detract from the narrative. In reality, Lindh was but a minor character in the operation.

Horse Soldiers is a good, gripping story about the accomplishments of a small force of courageous Special Forces, CIA and Air Force personnel operating under incredibly demanding circumstances. It reads like a novel, which, indeed, contributes to its shortcomings. Much of the dialogue in the book could well be adopted for a movie screenplay—which is sure to come. But this "creative nonfiction" will dissuade most serious writers from citing it as a reference.

***COL Alfred H. Paddock Jr.**, USA Ret., served three combat tours with Special Forces in Laos and Vietnam and commanded a psychological operations battalion and group. He holds a master's degree and doctorate in history from Duke University and is the author of* U.S. Army Special Warfare: Its Origins.

Rethinking the Use of Force

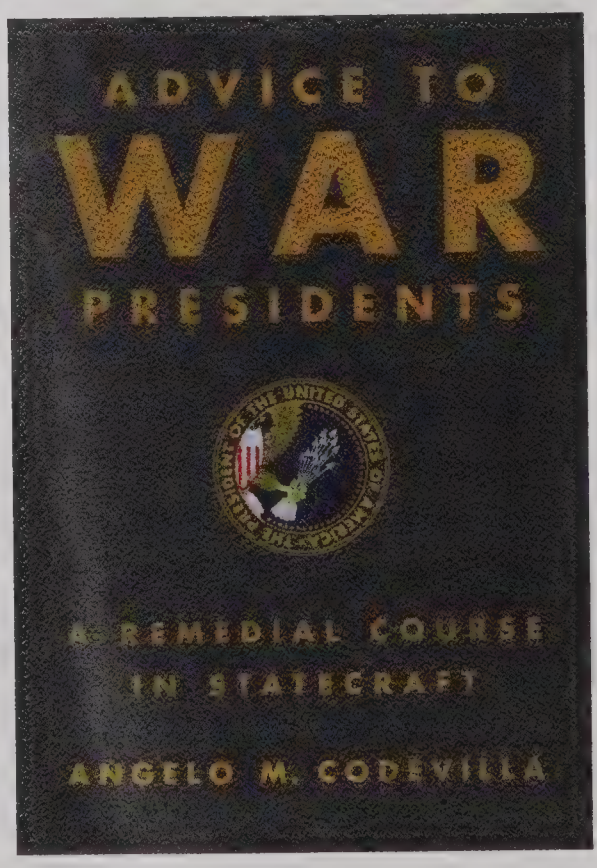
Advice to War Presidents: A Remedial Course in Statecraft. *Angelo M. Codevilla. Basic Books. 316 pages; index; $27.50.*

By James Jay Carafano

Military men and women spend far more time thinking about how to apply combat power than why we use it. That's probably not good. The *why* matters and is the main subject of Angelo M. Codevilla's *Advice to War Presidents: A Remedial Course in Statecraft.*

Trying to cleave the *why* and *how* of war and foreign policy into separate issues is a mistake—though many military professionals assume, as a matter of course, it is proper to do so. Most in the military still subscribe to notions of civil-military relations given by Samuel Huntington in his classic work *The Soldier and the State* (1957). Civil dominance over the military was maintained (as historian Eliot Cohen described Huntington's thesis) by "carving off for it [the armed forces] a sphere of action independent of politics." In fact, Huntington is still reprinted, read and taught even though contemporary scholars of civil-military relations question many of his fundamental conclusions. However, as Cohen argues in *Supreme Command: Soldiers, Statesmen and Leadership in Wartime* (2002), what Huntington describes is not how war works in the real world.

The politics of why we fight cannot be easily gleaned from what we do. This is truer today than ever. Politics



and warfighting meet not just across White House conference tables, but in village councils. Thinking about why we fight is integral to thinking about how we fight. Making strategy (harmonizing ends, ways and means) only works when the leaders managing all three elements talk to each other. That is a truism at every level of war.

Why we fight and how we relate to other states is the subject tackled by Codevilla, a former naval officer, Foreign Service officer and congressional staffer. He attacks the topic by critiquing virtually every modern international-relations theory that Presidents have invoked to justify foreign policies. With the exception of Ronald Reagan, Codevilla argues, almost every President (Republican and Democrat) since Teddy Roosevelt has gotten it wrong. Any decision to employ force or engage with the world for reasons other than advancing the nation's narrow self-interests is not right, he says. Getting it right, *Advice to War Presidents* concludes:

> ...will require transcending liberal internationalism, neoconservativism and realism—all variations of an ideology that assumes America's objectives and powers are essentially limitless, and that what happens in other countries is chiefly related, respectively, to human progress, to democratic progress, or to progress in the orderly adjustment of interests. Each from its own angle, these schools look for opportunities to

> manipulate foreigners for their own good, which they assume to be common or compatible with our good, rather than to assert and look out for America's good.

Putting America first, Codevilla concludes, is the essence of proper statecraft.

It is true enough that following to their extreme ends liberal theories of international relations such as classic Wilsonianism (derived from President Woodrow Wilson's justification for the U.S. entry into World War I) and neoconservative concepts such as "offensive" realism (states should proactively use their power to expand their influence and security) leads to the same place—trying to run the world. It is also true that trying to run the world—either alone or in partnership with other nations or a sprawling supranational bureaucracy—is a bad idea. It is antidemocratic. It is also impossible.

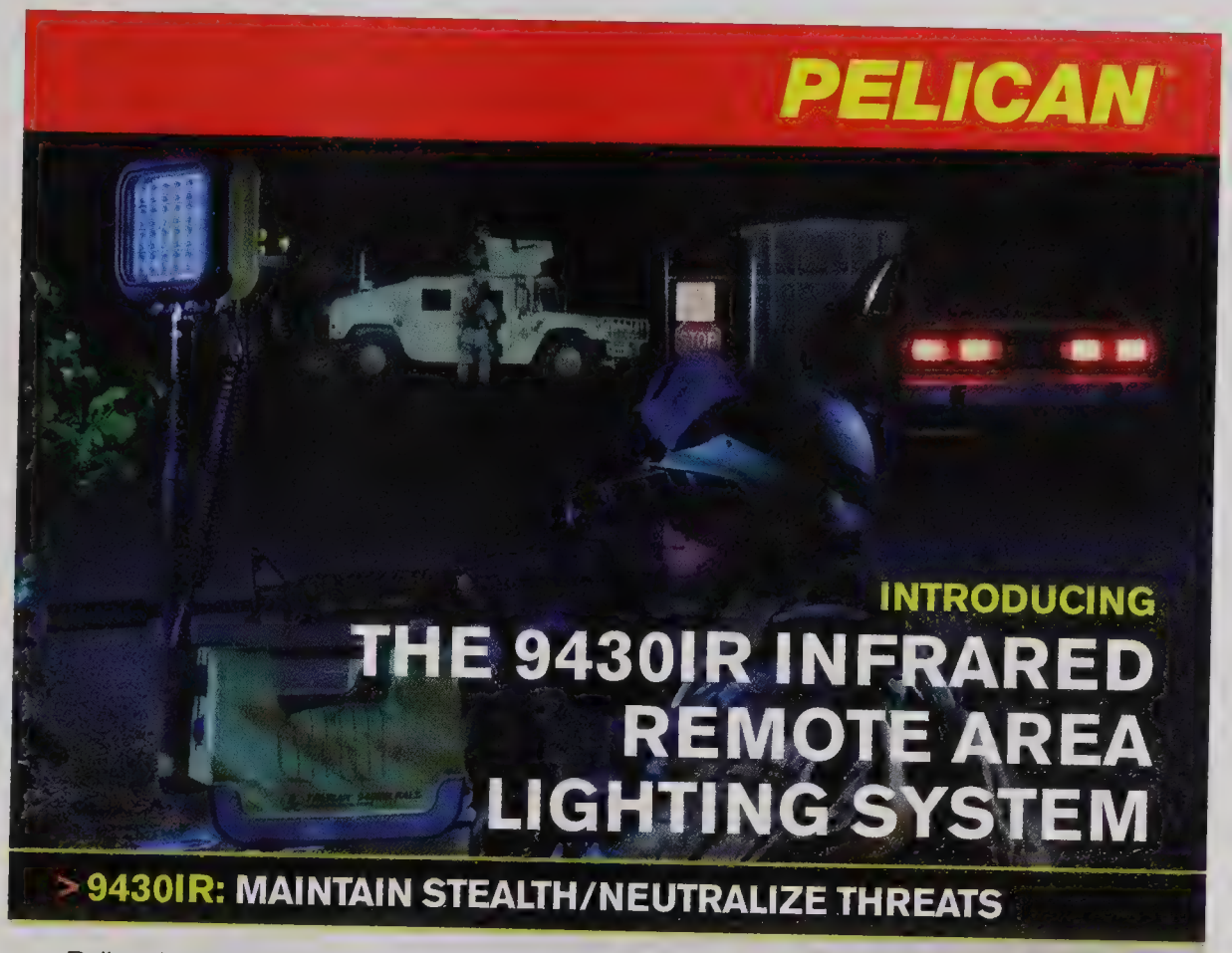
Advice to War Presidents is at its best in critiquing some of the worst ideas that have been offered to help make the world behave. Codevilla's critique of "soft power" is especially devastating. In particular, he takes on Joseph Nye's influential *Soft Power: The Means to Success in World Politics* (2004). To accept that soft power can supplant hard power, Codevilla contends:

> One would have to accept that force, threats and bribes, honor, fear and interest, play second fiddle in matters of life and death and none at all in the most important of things, how governments vote in the UN. One is tempted to ask: "On what planet?" Who lives by this supposed standard of legitimacy? What does it avail its supposed adherents? How does it punish violators? Nye does not address such questions.

This critique makes sense. Viewing soft power as a simple substitute or alternative for hard power is not terribly practical. The moral authority of Pope John Paul II, for example, was vital in helping to bring the Cold War to an end. One wonders how much progress he might have made without the hard stand taken by Reagan against the "evil empire." In matters of statecraft, the more hard power you have, the more soft power works.

Despite his many criticisms of presidential decision making and modern theories, there is one international-relations theory that Codevilla might approve—constructivism, which holds that how others view the world can only be properly understood by examining their social norms, cultural influences and sense of identity. In short, constructivism theorizes that all foreign policies are "socially constructed." Codevilla might well agree, since he accuses U.S. Presidents of "mirror imaging," interpreting world events and opinions as if everyone thought like Americans. They don't.

In this respect, America's culture of national security poses a problem for Codevilla's advice to war Presidents. U.S. political culture is a mixture of altruism and realism. The rhetoric of every President includes appeals to America as the "City on the Hill" with

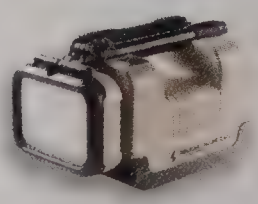


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special obligations and a special mission to advance the cause of freedom, as well as cold, calculating rational arguments suffused with explanations of how the nation's vital interests will be protected. Most Americans like to hear both. We believe others want and need our help and leadership. We also believe we should take care of our own.

When politicians mix metaphors together to appeal to both our self-interests and our generosity, we sometimes don't even know what they mean by what they say. Franklin D. Roosevelt, for example, laced much of his call to arms for entering World War II with the language of the New Deal (best expressed in the "Four Freedoms" declaration). When it came time to fight the war, however, he proved more than willing to jettison New Deal ideals. Did that represent a short-term accommodation, or was Roosevelt's New Deal rhetoric just window dressing? Did it matter as long as U.S. interests were appropriately addressed? These kinds of questions keep historians fully employed, but navigating them can be tough for contemporaries struggling to understand what their White House is up to.

Constructivist analysis might help strip some of the confusion away, but in practice that is much harder than it sounds. Transcending cultural and political bias is the most difficult of all intellectual struggles. Nevertheless, the act of critically thinking about why we fight is vital. In matters of national import, no assumption, opinion, prejudice or policy should go unexamined. The best preparation for critically thinking about wicked problems is reading wide, deep and varied approaches to national security decision making. *Advice to War Presidents* could be a slice of that corpus of study.

James Jay Carafano is a senior fellow at The Heritage Foundation and the author of G.I. Ingenuity: Improvisation, Technology and Winning World War II.

Varied Fare

The Battle of the Bulge: The Photographic History of an American Triumph. *John R. Bruning. Zenith Press. 320 pages; photographs; maps; index; $50.*

The Battle of the Bulge—which raged from December 16, 1944, to late January 1945 in the Ardennes region of Belgium and Luxembourg—was the largest and bloodiest land battle in which American forces participated during World War II. With the invasion of and breakout from Normandy in the summer of 1944, the tide had turned in the Allies' favor. The Germans were in retreat, and it was now a matter of how soon the war would end—and on what terms. The Allies chased the Germans across France and Belgium, hoping to beat them to the Siegfried Line, behind which the Germans would be able to regroup, reorganize and resupply. Supply issues stalled the Allied pursuit, however, and the Germans won the race to their defensive line.



Hitler devised a plan to take the British and American forces west of the line by surprise with a massive offensive, the goal of which was to neutralize the Western Front and force a negotiated peace. The stakes were high: "Failure [of the Allies] in the Bulge would have redrawn the postwar map and made the Cold War even worse." The Ardennes Offensive successfully surprised the Allies, and by Christmas 1944 the Germans had opened a "bulge" in the Allied lines. American soldiers fought in grueling conditions to beat back the German advance. Not only were they fighting the enemy—they were also battling zero-degree temperatures and snow with gear designed for warmer environments. Many divisions were composed of a mix of green replacements



A fire team from the 30th Infantry Division, armed with rifle grenades, prepares to enter and clear a house in the town of Stavelot, in the Ardennes region of eastern Belgium, in December 1944.

and exhausted veterans. Despite the conditions, courageous and determined American GIs stalled the German offensive, and eventually the Germans were pushed back to roughly the same lines as before the battle began. The Allied victory came at a tremendous price, however, with more than 80,000 U.S. casualties.

Military historian and author John R. Bruning wanted to tell the story of this battle "through the photographs taken by brave and dedicated combat cameramen," and he does so in *The Battle of the Bulge*. The text is accompanied by more than 400 photographs, some never before published. The majority of them are black and white, with a few color photographs interspersed. They portray not only American troops, but Germans as well, with snowy forest expanses and decimated urban ruins serving as backdrops. Some photos were taken in the heat of battle; others in the sad aftermath. A particularly haunting image captures a dead German soldier lying in the snow, a photograph of his wife still clutched in his frozen hand. Other photographs taken during lulls between combat chronicle troop movements and preparations. Numerous photographs of tanks and weapons are accompanied by captions providing additional information. Bruning also includes images from previous campaigns, illustrating the lead-up to the battle. In some instances, these photographs are mixed in with those taken during the Battle of the Bulge, so the reader would be wise to read the captions carefully.

Along with the photographs, Bruning provides a detailed account of the battle, beginning with background discussion of the race to the Seigfried Line and analysis of Hitler's plan. He then gives a detailed play-by-play of the action—the moves and countermoves on various sections of the battlefield. Stories are told on the division, regiment and individual levels; many officers and soldiers are mentioned by name—those whose heroic exploits and sacrifices would earn them the Medal of Honor, as well as those who buckled under pressure. There are stories of small units whose heroic stands were vital in delaying the German advance. Mistakes and flashes of brilliance on the part of American and German alike are discussed, along with their impact on the battle. Full-page color maps throughout the text put the troop movements in a wider context. Coverage of events after the relief of Bastogne is comparatively scant, however, encompassed in only a few paragraphs. With such heavy coverage of the lead-up to the battle, the quick wrap-up may leave some readers hungry for more detail.

The images in *The Battle of the Bulge* convey with stark honesty the brutality of war, along with the fraternity and solidarity it inspires. Sixty-five years after the largest land battle in U.S. Army history, those American soldiers who "played a vital role in defeating the Third Reich's last offensive and turned it into a death spasm instead of a victory march" still stand as the "ultimate symbol of who Americans are as a nation and a people."

—*Tenley Wadsworth*



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Historically Speaking

'Just Cause' at 20

By BG John S. Brown
U.S. Army retired

December 20, 2009, marks the 20th anniversary of Operation Just Cause, the American intervention in Panama that toppled the tyrannical regime of General Manuel Antonio Noriega. The campaign was not flawless but was masterful, and deserves due historical attention in its own right. It also offers timely and timeless lessons of interest and value today. These might include: Know your battlefield and your enemy. Play to your strengths. Identify your objectives.

During the Cold War, the United States indulged or made common cause with a number of Third World tyrants and dictators to better focus on the Soviet Union—the then-greatest danger. Of these, none proved more embarrassing than U.S. relations with Noriega. His rise to absolute power was facilitated by corruption, fraud, blackmail, extortion, intimidation, drug dealing and murder. The United States turned a blind eye because he assisted covert operations against Central American leftists and spied on Castro's Cuba, allegedly for cash.



DoD/MSgt. Ken Hammond

An M-35 truck carrying members of 1st Battalion, 509th Infantry, and their gear backs up to a C-130E Hercules in David, Panama. The soldiers parachuted into a drop zone outside the city in support of Operation Just Cause in 1990.

As the Cold War wound down, Noriega's misconduct became harder to overlook. A Florida court indicted him for drug smuggling. He was suspected of smuggling contraband to Cuba and of providing illicit arms to Colombian rebels. In May 1989, his handpicked candidate for president was defeated in national elections, and he declared them invalid. Thugs from Noriega's "Dignity Battalions" savagely beat opposition candidates in a public setting. American complaints aroused his ire, and American citizens in Panama came to be victims of harassment, intimidation and assault. On December 15, 1989, Noriega declared Panama to be "in a state of war" with the United States. The following day, his soldiers killed a U.S. Marine Corps officer at a roadblock and assaulted a Navy officer and his wife. President George H.W. Bush determined to intervene.

Just Cause itself was an operational masterpiece. Despite unfavorable weather in several staging areas, 13,000 soldiers from multiple posts in the United States flew to join 13,000 soldiers and marines already in Panama in near-simultaneous assaults on almost two dozen objectives. To preclude the Panama Defense Forces and Dignity Battalions from taking to the jungle for a prolonged guerrilla campaign, every enemy unit of company size or larger was isolated and attacked on the same night through some combination of clandestine, ground, airborne and air assault. Planning had been meticulous; in many cases American units had already been on ground they were to seize or secure in the course of artfully designed training exercises. An H-Hour scheduled for 0100 and moved forward allowed optimal exploitation of night-vision devices and night training. The newly introduced AH-64 attack helicopter and UH-60 utility helicopter performed superbly, as did such aging stalwarts as the M551 Sheridan armored reconnaissance airborne assault vehicle and the M113 armored personnel carrier.

Initiative, daring and competence at the tactical-unit level overcame those SNAFUs that did occur. Significant combat terminated within 72 hours, all geographical objectives were quickly secured and Noriega surrendered after a brief siege of his hiding place in the Papal Nunciature. American losses were 23 killed and 322 wounded, as compared to 314 killed and 5,300 captured among their adversaries. Post-combat operations were somewhat improvised, but Panamanians, by and large, accepted the Americans as liberators; legitimately elected Panamanian leadership existed to oversee civil affairs, and relatively little physical damage to communities and infrastructure had occurred. On January 12, 1990, the operation terminated, and combat forces in excess of those customarily deployed in Panama withdrew.

Panama was, of course, nearly ideal with respect to cultural and battlefield familiarity. American forces had been stationed in Panama for generations, and some units deployed only several hundred yards to seize their D-Day

objectives. Artfully designed training exercises labeled Sand Flea tramped units through areas they later were to fight over without compromising operational security. In the United States, units trained on objectives, particularly mock-up airfields, remarkably similar to those they were to assault in Panama.

Spanish-speaking soldiers were ubiquitous in American ranks, and soldiers of Panamanian descent not uncommon. Indeed, one of Just Cause's most perplexing issues stemmed from the reverse of cultural unfamiliarity. More than 40,000 noncombatant American citizens were scattered throughout Panama. Most were in—or made it to—secure areas or were protected by their neighbors, but hostage crises did occur: passengers seized at the Torrijos Airport, tourists and businessmen seized at the Marriott Hotel south of Panama Viejo, scientists and technicians seized from a Smithsonian Institution research team, and a college professor abducted from his home. These were happily resolved, except in the case of the college professor, who was killed by his captors. It follows that the U.S. armed forces were very familiar with their Panamanian counterparts. A few months before, Noriega had weathered a coup attempt largely because of the sustained loyalty—or complicity—of a number of critical commanders and units. American intelligence knew who these Noriega diehards were.

Just Cause played to American strengths beyond intelligence. As mentioned, the 0100 H-Hour exploited huge American advantages with respect to night fighting. Night-vision devices were widely available to infantrymen and were virtually universal on combat vehicles and aircraft. American forces trained extensively at night and were well prepared to make this advantage work for them. Air supremacy made possible a simultaneous assault on numerous dispersed targets, reducing the risk that major enemy formations would make it into the jungle intact to continue the fight. Precision-guided munitions, although not as numerous or capable as those of today, extinguished high-value targets while minimizing collateral damage. The realistic multiple integrated laser engagement system-based training and improved operational doctrine of the post-Vietnam War renaissance showed well in Panama, as did disciplined habits of rehearsal and after action review. Planners knew that policing the streets would not be an American forte and endeavored to get this task back into Panamanian hands as quickly as possible. There were some initial embarrassments: Many of the soldiers and policemen, hastily returned to duty by the new Panamanian government, had just been fighting the Americans, and included thugs and war criminals. These, with help from locals, were cleaned out fairly quickly. American disengagement was enormously facilitated by the presence of indigenous security forces.



DoD/MSgt. Ken Hammond

Three members of the 7th Infantry Division walk past a restaurant in the city of Sano, Panama. Significant combat ended within 72 hours of the December 20, 1989, start date of Operation Just Cause, which terminated 24 days later.

Just Cause identified Noriega personally as a principal objective and pursued him relentlessly, both to bring him to justice and to unequivocally clear space for the elected government. A number of airfields were targeted, in part because they might offer him an escape route, and considerable effort went into apprehending him personally. After hair's-breadth escapes, Noriega was finally cornered and surrendered. The Americans whisked him out of the country to stand trial in due course. The Americans took a residual interest in the training and vetting of the Panamanian police and army, but stepped away from direct control outside the Canal Zone, which remained on track for a 1999 turnover to Panama. Regime change neatly corresponded with the capabilities the United States deployed, and the mission was accomplished.

Just Cause remains a model of its type. We have mounted numerous contingency operations in the 20 years since, but none that has gone better. Insofar as lessons and insights from Panama correspond to more recent circumstances, we should keep them in mind. ★

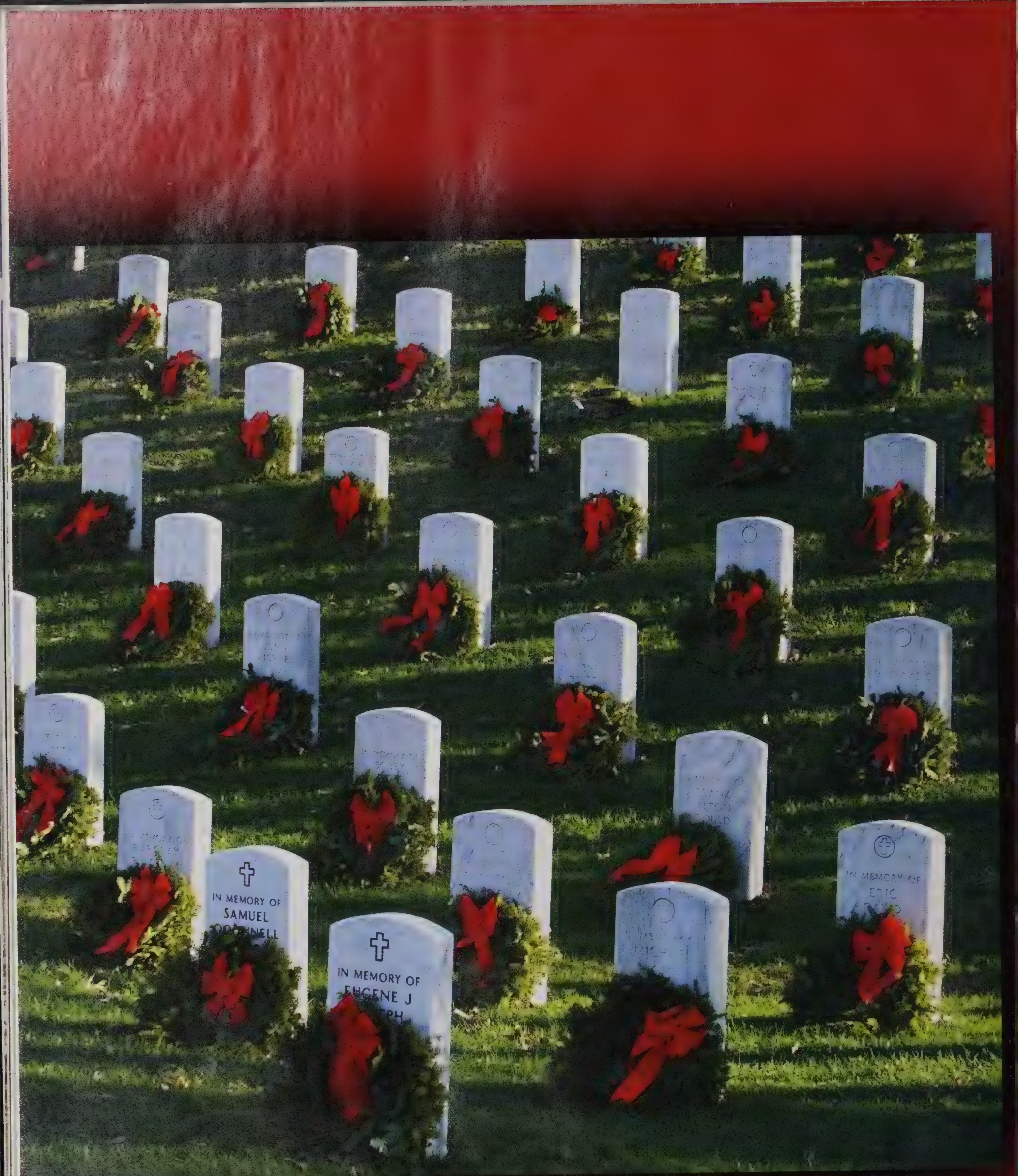
Recommended Reading:

Donnelly, Thomas, et al., *Operation Just Cause: The Storming of Panama* (New York: Maxwell Macmillan International, 1991)

Phillips, R. Cody, *Operation Just Cause: The Incursion into Panama* (Washington, D.C.: Center of Military History, 2004)

Stewart, Richard W., ed., *American Military History, Volume II: The United States in a Global Era, 1917–2003* (Washington, D.C.: Center of Military History, 2005)

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: Army Transformation 1989–2005, *is forthcoming.*



Photograph by Robert C. Knudsen from his recent book, *A Living Treasure: Seasonal Photographs of Arlington National Cemetery*

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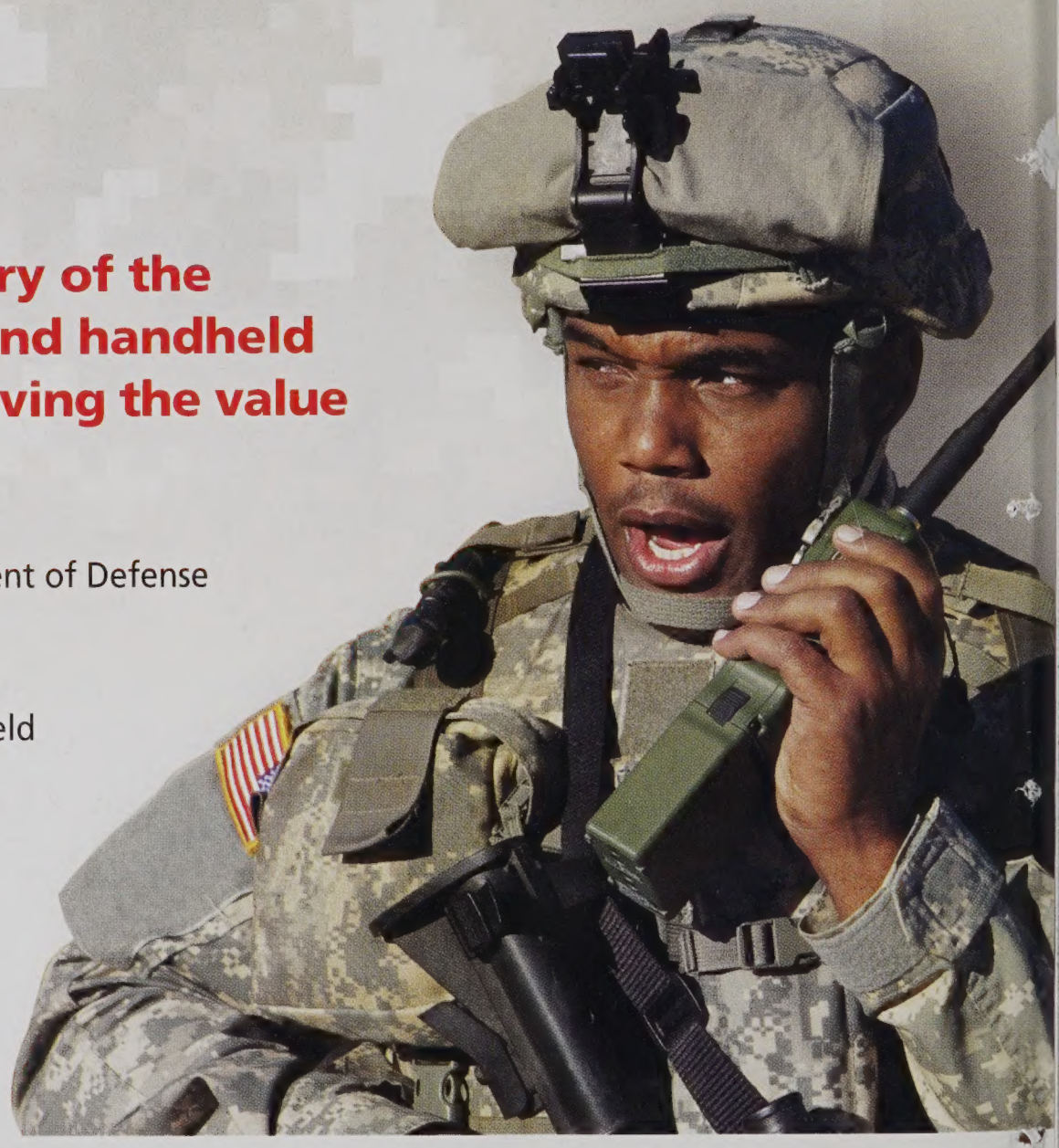
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